

APPENDIX
Volume I—Pages 1-464

SEP 26 1973

MICHAEL DOBAK, JR., C.

Supreme Court of the United States

OCTOBER TERM, 1973

No. 72-402

UNITED STATES OF AMERICA

Appellant

v.

**GENERAL DYNAMICS CORPORATION, THE UNITED
ELECTRIC COAL COMPANIES, AND FREEMAN
COAL MINING CORPORATION**

**ON APPEAL FROM THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS**

**JURISDICTIONAL STATEMENT FILED SEPTEMBER 8, 1972
PROBABLE JURISDICTION NOTED DECEMBER 11, 1972**

Supreme Court of the United States

OCTOBER TERM, 1973

No. 72-402

UNITED STATES OF AMERICA

Appellant

v.

GENERAL DYNAMICS CORPORATION, THE UNITED
ELECTRIC COAL COMPANIES, AND FREEMAN
COAL MINING CORPORATION

ON APPEAL FROM THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS

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* Not reprinted in Joint Appendix. Citation is to appendix of Jurisdictional Statement.

**UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS**

Civil Action No. 67 C 1632

UNITED STATES OF AMERICA, PLAINTIFF

v.

**GENERAL DYNAMICS CORPORATION,
THE UNITED ELECTRIC COAL COMPANIES AND
FREEMAN COAL MINING CORPORATION, DEFENDANTS**

RELEVANT DOCKET ENTRIES

Date

1967

September 22 Filed Complaint and 3 copies

October 17 On stipulation order time for defendants to answer, move or otherwise reply to complaint hereby extended to and including Nov. 20, 1967.
DRAFT-Robson, J.

1968

March 21 Filed letter re interrogatory No. 54 from attorney for plaintiff.

July 16 Enter Pretrial Order No. 1 (DRAFT). Enter Protective Order with respect to defendants documents (DRAFT). Enter Order with respect to defendants Claim of Attorney-Client Privilege (DRAFT).
ROBSON, J.

September 9 Filed Stipulation and Protective Order covering disclosure to defense counsel of information received by Plaintiff from Coal Companies and Coal Purchasers

Date

1968

September 9 Enter Order approving stipulation and entering protective order covering disclosure to defense counsel of information received by plaintiff from coal companies and coal purchasers (DRAFT) (Above Stipulation and Minute order combined as one Draft)
ROBSON, J.

1969

March 11 Enter agreed orders directing clerk to issue subpoenas duces tecum in the form attached for service in any judicial district upon respondents listed in Exhibit A, by registered mail, return receipt requested, with questionnaires attached. Order documents, etc., and any responses to questionnaire to not be shown to persons designated in orders except by order of Court (2 DRAFTS)
ROBSON, J.

September 11 Filed deposition of Clarence V. Beck.

September 18 Filed Stipulated testimony by Daniel G. Hemminger, Attorney for The Proctor and Gamble Company, Cincinnati, Ohio.

September 18 Filed Stipulated testimony by John Sant, Attorney, McDonnell Douglas Corporation, St. Louis, Missouri.

October 1 Filed stipulated testimony of George B. Knecht with exhibits 1 through 10 attached.

October 3 Pre trial conference held. Order proposed findings of fact, etc., to be submitted by November 17 and cause set for further pre-trial conference on December 5, 1969 at 2 p.m.—
Robson, J.

Date	
1970	
March 23	Filed Plaintiff's pre-trial brief.
March 30	Cause called for trial. Opening statements made. Evidence heard for government. Government rests. Order any motions to be made by defendant to be entered and considered with case itself. Evidence heard in part for defendant. Order cause adjourned until March 31, 1970—Robson, J.
March 31	Further evidence heard for defendant. Order cause adjourned until April 1, 1970—Robson, J.
April 1	Filed defendant's motion to dismiss at the close of plaintiff's case
April 1	Further evidence heard for defendant—order cause adjourned until April 2, 1970—Robson, J.
April 2	Further evidence heard for defendant. Order cause adjourned until April 3, 1970 at 9 a.m.—Robson, J.
April 3	Further evidence heard for defendant—order cause adjourned until April 6, 1970—Robson, J.
April 6	Further evidence heard for defendant. Order cause adjourned until April 7, 1970—Robson, J.
April 7	Further evidence heard for defendant—Order cause adjourned until April 8, 1970—Robson, J.
April 8	Further evidence heard for defendant order cause adjourned until April 9, 1970—Robson, J.

Date

1970

- April 9 Further evidence heard for defendant—
Order cause adjourned until April 13, 1970—
Robson, J.
- April 13 Further evidence heard for defendant. Order
cause adjourned until April 14, 1970—Rob-
son, J.
- April 14 Further evidence heard for defendants. Or-
der cause adjourned until April 15, 1970—
Robson, J.
- April 14 Filed Defendants' response to plaintiff's mem-
orandum request that it be allowed to call
rebuttal witnesses for purposes other than
those originally represented to the Court and
to the defendants.
- April 14 Filed Plaintiff's reply to defendant's objec-
tion to the expended scope of questions possi-
bly to be asked of two of plaintiff's rebuttal
witnesses.
- April 15 Court rules orally from bench—Order plain-
tiff's motion to expand rebuttal testimony
hereby granted—Further evidence heard for
defendant—order cause adjourned until April
16, 1970—Robson, J.
- April 16 Further evidence heard for defendant. Order
cause adjourned until April 17, 1970—Rob-
son, J.
- April 17 Rebuttal evidence heard in part for govern-
ment. Order cause adjourned until April 20,
1970—Robson, J.
- April 20 Evidence heard in part for defendants. Evi-
dence heard in part in rebuttal for govern-
ment—Order cause adjourned until April 21,
1970—Robson, J.

Date 1970	
April 21	Evidence heard for defendant. Order cause adjourned until April 22, 1970—Robson, J.
April 22	Further evidence heard for defendant. Defendant rests. Further rebuttal evidence heard for government. Order cause adjourned until May 1, 1970 at 11 a.m. to rest formally and to set briefing schedule on the merits—Robson, J.
May 12	Filed Subpoena ad testificandum returned served on Glen W. Beeman—\$2.
May 12	Filed Subpoena ad testificandum returned served on M. A. Shumate. \$2.
May 12	Filed Defendants' motion to strike certain Government exhibits.
May 20	Filed Notice
May 20	Filed Government's memorandum in opposition to defendants' memorandum in support of its motion to strike certain Government Exhibits
June 8	Filed Defendants' reply memorandum to the Government's memorandum in opposition to defendants' motion to strike certain Government Exhibits.
June 15	Filed Notice
June 15	Filed Response to Defendants' Reply to Government's memorandum regarding objections to Government Exhibits
August 3	Filed Government's post trial brief, (findings of fact and conclusions of law).
August 28	Filed Corrections to Government's post trial brief, findings of fact and conclusions of law filed August 3, 1970.

Date.

1970

- October 27 Filed defendant's reply to plaintiff's proposed findings of fact and conclusion of law.
- October 27 Filed Defendant's Post-Trial Brief.
- November 5 Filed correction to defendant's reply to plaintiff's proposed findings of fact and conclusion of law.

1971

- January 11 Filed Government's response to Defendants proposed findings of fact and conclusions of law.
- January 14 Filed Plaintiff's Post Trial Reply Brief.
- March 8 Enter agreed order permitting sale of one-half interest in Midwest Towing Company, Inc., with proceeds of sale to be placed in escrow—Robson, J. (DRAFT)

1972

- April 13 It is ordered that judgment be and it is hereby rendered for the defendants. It is further ordered that the complaint be and it is hereby dismissed. It is further ordered that costs be assessed against the plaintiff. (Draft) Robson, J.
- June 7 Filed notice of appeal to the Supreme Court of the U.S. by the United States of America.
- October 27 It is hereby ordered that all funds presently deposited under the terms of Escrow Agreement dated March 11, 1972 between United Electric Coal Companies and the First National Bank of Chicago are to be released to the United Electric Coal Companies upon presentation of a certified copy of this Order

Date

1972

- October 27 and the escrow dissolved. Within 30 days of completion of the purchases referred to in the Order, the United Electric Coal Companies shall file with the Court, and plaintiff, a copy of all receipts for payment for such purchases. (DRAFT) ROBSON, C.J.
- December 18 Filed certified copy of order from Supreme Court of the United States: The statement of jurisdiction in this case having been submitted and considered by the Court, probable jurisdiction is noted.
- December 22 Filed letter dated December 19, 1972 from Supreme Court of the United States, re transmitting of Record under Rule 16(6)

1973

- February 5 Filed depositions of Frank Frederick Kolbe in 12 volumes.
- February 5 Filed deposition of Harold S. Walker, Jr.
- February 5 Filed deposition of P. W. Dorrance
- February 5 Filed deposition of George P. Gamble
- February 5 Filed deposition of Bernard W. Schotters.
- February 5 Filed deposition of Leroy M. Abramson.
- February 5 Filed deposition of Abraham Gerber.
- February 5 Filed deposition of John Paul Weir.
- February 5 Filed deposition of Leon King.
- February 5 Filed deposition of Jack A. Simon.
- February 5 Filed deposition of John P. Nix.
- February 5 Filed deposition of Aldo P. Brazzale.
- February 5 Filed deposition of Josephine C. Burton.

Date**1973**

February 5	Filed deposition of William J. Stanley.
February 5	Filed deposition of William D. Stiehl.
February 5	Filed deposition of Thomas N. Ward.
February 5	Filed deposition of John Samuel Moore.
February 5	Filed deposition of Joseph J. Gallagher.
February 5	Filed deposition of William L. Kurtz.
February 5	Filed deposition of Reuben A. Redard.
February 5	Filed deposition of Harry B. Gaunt.
February 5	Filed deposition of Winford C. Peterson.
February 5	Filed deposition of John E. Organ.
February 5	Filed deposition of Gordon J. Morrison.
February 5	Filed deposition of S. Smith Griswold.
February 5	Filed deposition of Hugh E. Petersen.
February 5	Filed deposition of Bruce C. Netschert.
February 5	Filed deposition of Peter O. Steiner in two volumes.
February 5	Filed deposition of Thomas H. Latimer in two volumes.
February 5	Filed deposition of John M. Morris in two volumes.
February 5	Filed deposition of Robert H. Inman.
February 5	Filed deposition of Joseph C. Tabor.
February 5	Filed deposition of Thomas J. Tarzy in two volumes.
February 5	Filed deposition of B. H. Sloane.
February 5	Filed deposition of John P. Maguire.
February 5	Filed deposition of Harold K. Pedersen.

Date

1973

- February 5 Filed deposition of Charles W. Stadell.
- February 5 Filed deposition of Martha Terleke.
- February 12 Filed Plaintiff's Exhibits in Twenty (20) Volumes.
- February 12 Clerk's file copy of transcript of proceedings had before Hon. Edwin A. Robson, on March 26, 1969, May 1, 1969 in 2 volumes, July 8, 1969, July 14, 1969, September 4, 1969, October 3, 1969, November 5, 1969, January 30, 1970, February 13, 1970, March 4, 1970, March 13, 1970, March 30, 1970, April 7, 1970 in 2 volumes, April 8, 1970 in 2 volumes, April 9, 1970 in 2 volumes, April 13, 1970 in 2 volumes, April 14, 1970, April 15, 1970 in 2 volumes, April 16, 1970 in 2 volumes, April 17, 1970, April 20, 1970 in 2 volumes, April 21, 1970 in 2 volumes, April 22, 1970 in 2 volumes, May 1, 1970, March 30, 1970 in 2 volumes, March 31, 1970 in 2 volumes, April 1, 1970 in 2 volumes, April 2, 1970 in 2 volumes, April 3, 1970, April 6, 1970 in 2 volumes, June 30, 1970 and June 8, 1971, Filed by the Official Court reporter in 48 Volumes.
- February 15 Filed Defendant's Exhibits in 21 Volumes.

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

Civil Action No. 67 C 1632

UNITED STATES OF AMERICA, PLAINTIFF

v.

GENERAL DYNAMICS CORPORATION,
THE UNITED ELECTRIC COAL COMPANIES AND
FREEMAN COAL MINING CORPORATION, DEFENDANTS

Equitable Relief Sought

Filed: September 22, 1967

COMPLAINT

The United States of America, by its attorneys, acting under the direction of the Attorney General of the United States, brings this action against the defendants named herein, and complains and alleges as follows:

I

JURISDICTION AND VENUE

1. This complaint is filed and this action is instituted under Section 15 of the Act of Congress of October 15, 1914 (15 U.S.C. § 25), as amended, commonly known as the Clayton Act, in order to prevent and restrain the violation by the defendants of Section 7 of that Act.

2. Each of the defendants is found and transacts business within the Northern District of Illinois, Eastern Division.

II

DEFENDANTS

3. General Dynamics Corporation (hereinafter referred to as "GD") is named a defendant herein. GD is a corp-

oration organized and existing under the laws of the State of Delaware and maintains its principal place of business in New York, New York. GD is engaged in the manufacture and sale of a wide variety of products associated with, among others, the defense, space, nuclear, and electronic industries. GD, through subsidiaries, is also engaged in the mining and sale of coal. For the year ended December 31, 1965, GD had net sales of \$1,472,785,000 and net profit after taxes of \$49,269,000.

4. The United Electric Coal Companies (hereinafter referred to as "UEC") is made a defendant herein. UEC is a corporation organized and existing under the laws of the State of Delaware and maintains its principal office in Chicago, Illinois. UEC, which was incorporated under the laws of the State of Delaware in 1918, was merged into UEC Corporation on November 7, 1966. The name of the surviving corporation, which was incorporated under the laws of the State of Delaware on October 13, 1966, was changed to The United Electric Coal Companies. Any reference to UEC includes the predecessor of UEC. UEC operates four bituminous coal mines, all of which are located in the State of Illinois. For the year ended December 31, 1965, UEC had net sales of \$21,803,576 and net profit after taxes of \$2,467,744.

5. Freeman Coal Mining Corporation (hereinafter referred to as "Freeman") is made a defendant herein. Freeman, an Illinois corporation with its principal office located in Chicago, Illinois, is a wholly owned subsidiary of GD. Freeman operates four bituminous coal mines, all of which are located in the State of Illinois. In 1965 Freeman had net sales of \$31,665,837 and net profit after taxes of \$1,114,220.

III

DEFINITIONS

6. The Eastern Interior Coal Province is defined as the bituminous coal field which blankets sixty-seven per cent of Illinois and much of southwestern Indiana and western Kentucky. This bituminous coal field constitutes a single, large bituminous coal region which is geologically united.

7. The Eastern Interior Coal Province sales area is

defined as the area of Illinois, western Indiana, western Kentucky, western Tennessee, eastern Missouri, eastern Iowa, southwestern and central Wisconsin and southeastern Minnesota.

IV

TRADE AND COMMERCE

8. Bituminous coal represents one of the most important of the mineral resources in the United States. In the modern industrial economy bituminous coal is of critical importance in providing a dependable and low-cost source of energy. This is particularly true with respect to the electric power utilities which now consume more than half of the total United States consumption of coal. The requirements of the electric utilities for coal are expanding.

9. In the more than two centuries in which coal has been mined in the United States, it is estimated that less than 4 per cent of the nation's known recoverable reserves of coal have been produced and consumed. It is estimated that the United States now has between 830 billion tons and 2,000 billion tons of coal reserves which can be recovered. At the present rate of United States coal production this is enough coal to last more than 1,500 years.

10. Bituminous coal production in the United States in 1965 and 1966 amounted to 512,088,000 tons and approximately 532,000,000 tons, respectively. It is estimated that in 1967, 545,000,000 tons of bituminous coal will be produced in the United States.

11. In 1965 the State of Illinois ranked as the fourth largest bituminous coal producing State in the United States with an output of 58,232,480 tons. However, Illinois is the leading State in bituminous coal reserves with estimated recoverable reserves as of January 1, 1967 of 67,800,000,000 tons.

12. Because of the high cost of transporting bituminous coal, customers endeavor to purchase bituminous coal which is mined as close to the customers' bituminous coal consuming facility as possible. In 1965 approximately 76 per cent of the bituminous coal sold in Illinois was pro-

duced in Illinois and approximately 58 per cent of the bituminous coal produced in Illinois was sold in Illinois.

13. The Eastern Interior Coal Province produced a total of 113,247,682 tons of bituminous coal in 1965. It is estimated that approximately 80 per cent of the bituminous coal consumed in the Eastern Interior Coal Province sales area was produced in the Eastern Interior Coal Province.

14. In 1965 Freeman, a wholly owned subsidiary of GD, produced 7,257,856 tons of bituminous coal from its mines which are all located within Illinois and ranked second in the production of bituminous coal in Illinois with 12.46 per cent of total 1965 Illinois bituminous coal production. In 1965 at least 63 per cent of the bituminous coal sales of Freeman were to electric utility customers and at least 18 per cent were to industrial customers. In 1965 approximately 47 per cent of Freeman's total production was sold to customers located in the State of Illinois, accounting for approximately 7.8 per cent of the bituminous coal sold in Illinois in that year. From its mines located in Illinois, Freeman regularly sells and ships bituminous coal to customers located in other States in the United States.

15. In 1965 UEC produced 5,348,641 tons of bituminous coal from its mines which are all located within Illinois and ranked third in the production of bituminous coal in Illinois with 9.18 per cent of total 1965 Illinois bituminous coal production. In 1965, 73 per cent of the bituminous coal sales of UEC were to electric utility customers and 23 per cent were to industrial customers. In 1965 approximately 72 per cent of UEC's production was sold to customers located in the State of Illinois, accounting for approximately 8.5 per cent of the bituminous coal sold in Illinois in that year. From its mines located in Illinois, UEC regularly sells and ships bituminous coal to customers located in other States in the United States.

16. If GD had owned UEC during all of 1965, GD would have ranked second in bituminous coal production in Illinois with 21.64 per cent of the total 1965 Illinois bituminous coal production. The 1965 combined bitum-

inous coal production of GD and UEC in Illinois was more than twice the production of the next largest Illinois bituminous coal producer. The combination of GD and UEC ranks as the second largest seller of bituminous coal in Illinois.

17. In 1965, Freeman, a wholly owned subsidiary of GD, ranked fourth in the production of bituminous coal in the Eastern Interior Coal Province, accounting for approximately 6.41 per cent of total 1965 production. UEC ranked sixth in the production of bituminous coal in this area, accounting for approximately 4.72 per cent of total 1965 production.

18. If GD had owned UEC during all of 1965, GD would have ranked second in production in the Eastern Interior Coal Province with 11.13 per cent of this area's total 1965 coal production. The combination of GD and UEC ranks as the second largest seller of bituminous coal in the Eastern Interior Coal Province sales area.

19. The bituminous coal industry is highly concentrated among the leading producers due in large part to mergers. In Illinois in 1965 the three leading producers of bituminous coal, Peabody Coal Company, Freeman, and UEC, accounted for approximately 50 per cent of total Illinois production. In 1965, these companies accounted for approximately 42 per cent of total bituminous coal production in the Eastern Interior Coal Province.

20. Freeman and UEC have been direct and substantial competitors in the sale of bituminous coal to customers located primarily in the State of Illinois. In 1965 at least 53 per cent of Freeman's dollar sales and approximately 61 per cent of UEC's dollar sales were to the same customers.

V

OFFENSE CHARGED

21. Material Service Corporation, as of December 30, 1959, had acquired approximately 34.27 per cent of UEC's outstanding stock. Freeman at that time was a wholly owned subsidiary of Material Service Corporation.

22. On or about December 31, 1959, GD acquired the Material Service Corporation. As a result of GD's acquisition of Material Service Corporation, GD acquired a stock investment in UEC equal to approximately 34.27 per cent of UEC's outstanding shares and Freeman became a wholly owned subsidiary of GD. By December 1963 GD had acquired over 50 per cent of the outstanding shares of UEC, and on October 5, 1966 GD offered to purchase the remaining outstanding shares of UEC. By December of 1966 GD had acquired at least 90 per cent of the outstanding shares of UEC and shortly thereafter UEC became a wholly owned subsidiary of GD.

23. The effect of the acquisitions by Material Service Corporation and by its successor, defendant GD, of UEC's stock has been and will be substantially to lessen competition or trend to create a monopoly in the production and sale of bituminous coal in the State of Illinois and in the Eastern Interior Coal Province sales area, and in various other sections of the country, in violation of Section 7 of the Clayton Act in the following ways, among others:

- (a) Actual and potential competition between GD's wholly owned subsidiary Freeman and UEC has been eliminated;
- (b) Actual and potential competition generally in the production and sale of bituminous coal may be substantially lessened; and
- (c) Concentration in the production and sale of bituminous coal has been and may be further increased.

PRAYER

WHEREFORE, plaintiff prays:

1. That the acquisition described in paragraph 22 of this complaint be adjudged a violation of Section 7 of the Clayton Act.
2. That a preliminary injunction issue enjoining defendants GD, Freeman, and UEC, their officers, directors, employees, and agents pending adjudication of the merits of this complaint from:

- (a) Taking any further action to change, directly or indirectly, the operation of the business of UEC or the personnel connected with such operation; and
- (b) Shifting sales, personnel, or equipment or any assets whatsoever of UEC to any of the mines and facilities of GD and Freeman.

3. That GD be required to divest itself of all the stock and assets of UEC acquired or resulting from the acquisition.

4. That GD and Freeman be enjoined from acquiring stock or assets of any other firm engaged in the production or sale of bituminous coal in the State of Illinois or in the Eastern Interior Coal Province.

5. That the plaintiff have such other and further relief which the Court may deem just and proper.

6. That the plaintiff recover the costs of this suit.

Dated:

/s/ Ramsey Clark
RAMSEY CLARK
Attorney General

/s/ Donald F. Turner
DONALD F. TURNER
Assistant Attorney General

/s/ Baddia J. Rashid
BADDIA J. RASHID

JOHN E. SARBAUGH

BERTRAM M. LONG
Attorneys, Department of Justice

EDWARD V. HANRAHN
United States Attorney

JOHN T. CUSACK

Attorney, Department of Justice
Room 2634 United States Courthouse
Chicago, Illinois 60604
353-6975

AFFIDAVIT

STATE OF ILLINOIS)
) ss
COUNTY OF COOK)

JOHN T. CUSACK, being duly sworn, deposes and states that he is an attorney employed by the United States Department of Justice; that he has been actively engaged in the preparation of this proceeding; that he has read the foregoing Complaint and knows the contents and is familiar with the subject matter thereof; that he is informed and believes that the allegations of fact contained therein are true; and that his information consists of data, documents, and written statements supplied the Department of Justice by the defendants and information obtained from recognized trade and Government sources.

/s/ John T. Cusack
JOHN T. CUSACK

Subscribed and sworn to before me this day of
, 1967.

/s/ Kathryn M. Reilly
Notary Public

My commission expires March 22, 1969.

[8]

EXCERPTS FROM DEPOSITION OF
FRANK NUGENT,
TAKEN SEPTEMBER 10-11, 1968

* * * *

FRANK NUGENT,

called as a witness by the plaintiff herein, having been by me, the said Frances B. Spina, as Notary Public aforesaid first duly sworn, was examined upon oral interrogatories and he did thereupon depose and testify as follows:

DIRECT EXAMINATION

BY MR CUSACK:

Q Please state your full name.

A Frank Nugent.

Q What is your home address?

A 1630 Sheridan Road, Wilmette, Illinois.

Q By whom are you employed, Mr. Nugent?

A General Dynamics Corporation.

Q And what is your position at General Dynamics?

A Group Vice-President.

Q And where is your office located?

A 300 West Washington Street.

Q Could you give us a little something about your educational background, Mr. Nugent?

[4] A Evanston High School, a good many years ago, and I can't tell you the year, plus night school work, and so forth; private tutoring, I guess you could say.

Q When did you first go into business?

A I went in the coal business in 1920 with the Rock Island Coal Mining Company. I remained there for a short period of time, and then went to work for the Freeman Coal Mining Corporation on November 14, 1921.

Q Was Freeman at that time headquartered in Chicago?

A Yes.

Q And where were its mines located?

A It was a sales company, and until 1922 it had no coal mines. It was a jobbing company. In 1922 it acquired a coal mine.

Q By "a jobbing company," you mean it sold the coal produced by others?

A Wholesale, yes.

Q And where was the first mine?

A The first mine was the Bobby Dick Mine located in Williamson County in Southern Illinois.

Q And that was in 1922?

[5] A August 24, 1922, I believe.

Q Mr. Nugent, would you please tell us what your duties were at Freeman?

A I started off as a cost accountant, from that into traffic work, and from traffic work into sales work.

Q Traffic work, what does that involve, sir?

A Freight rates, and so forth.

Q From the mine to the customer?

A From the mine to the customer.

Q And this is an important aspect of the coal business?

A Very much so.

Q After 1922, sir, what mines did Freeman open? Can you tell us?

A Well, we had a mine at Johnson City, I don't remember the year, and we later had a mine at Du Quoin, Illinois. We also represented mines that we didn't own, sold coal for them.

Q As a wholesaler?

A As a Wholesaler.

I think we operated in that fashion until we acquired a mine from the Great Western Railway, and I think that was in the early 1930's. [6] That was known as the Seymour Mine.

Q This Seymour Mine that was acquired from the Great Western Railway, would that have been around 1932?

A Just about. I would think somewhere in there.

Q Do you recall where that mine was located, sir?

A It was just outside of Herrin, Illinois.

Q That is in the Southern Illinois mining district?

A Southern Illinois, yes.

Q And how big a mine was that?

A It was a small mine, I think two or three thousand tons a day.

Q Do you recall how much this cost Freeman?

A No, I don't.

Q Directing your attention, sir, to the middle 1930's, how many mines did Freeman operate?

A I think we had operated the Bobby Dick Mine and Seymour Mine, and we built a mine that we called Freeburn. I don't recall the year that we put that mine in.

Q Do you know where that mine was located?

[7] A It was located adjacent to the mine that was owned by the Cosgrove Coal Company, just outside of Herrin and off Highway 37, just to the west of Highway 37 and a little north of Johnson City.

Q Do you recall the approximate production of that mine, sir?

A It was around, I think 3,000 tons a day, 4,000, perhaps.

Q I see. Going then to the late 1930's and the early 1940's how many mines did Freeman operate?

A We next put in the No. 4 Mine. I believe that was in 1942 or thereabouts, and it was over near a little town there. I can't think of the name there, but it was in Williamson County.

Q Williamson County, Illinois?

A Yes.

Q Directing your attention, then, sir, to 1942, you had the No. 4 mine at Williamson County.

A Yes.

Q What other mines were at that time operated by Freeman?

A I am not so sure that the Bobby Dick [8] Mine was still in operation at that time, but we operated the Freeburn Mine, and then we—yes, the Bobby Dick Mine was in operation. We had Bobby Dick, Freeburn, and I think at that time we had perhaps closed Seymour down, but I am not sure.

Q So at least you had the No. 4, Freeburn, Bobby Dick, and possibly Seymour.

A Yes.

Q Can you recall, sir, the production of Freeman Coal in 1942, approximately?

A Oh, I think that No. 4 was around 4,000 tons a day, and I believe Freeburn was about the same. Bobby Dick, if it was in operation, probably was a little less.

Q Could you tell us, sir, the yearly production of all of Freeman in 1942, approximately?

A Oh, only just by multiplying those figures perhaps by 200 days a year, maybe a little less.

Q Would it be over a million tons?

A I would imagine perhaps so.

Q At 200 days a year, 4,000 tons would be 800,000 tons a year from the No. 4, and if [9] the Freeburn was approximately the same, 4,000 tons a day for 200 days, that would again be 800,000 tons.

A Yes.

Q So your production then would be in excess of a million six in 1942, approximately?

A Perhaps so, yes. I don't recall.

Q What was the production of Bobby Dick when it was in operation, sir? Do you know, approximately?

A That is a long time back. I guess around two or three thousand tons a day.

Q Two or three thousand tons a day?

A I am not sure of that.

Q I see. Now, did Freeman undergo any more acquisitions after the acquisition of this mine from the Great Western Railroad in 1932, any further acquisitions of mining property between 1932 and 1942?

A No.

Q Did Freeman have any affiliation with the Burton Coal Company?

A Burton was a sales company.

* * *

[13] Q In what year did Material Service [14] acquire Freeman and Burton?

A In 1942. Not Burton. At that time I don't believe they acquired Burton, although I am not sure.

Q When did Material Service acquire Burton?

A Well, if they did acquire Burton, and I am not so sure that they did, it would have been in 1942.

Q Is Burton Coal still in existence?

A No, no.

Q Do you know what happened to it?

A No, I really don't.

Q Did Freeman start to handle its own sales?

A Yes, as Freeman Coal.

Q In what year was this?

A I believe we went under the name of Freeman in 1942, although I am not sure.

Q When Material Service purchased Freeman, did Freeman become a wholly-owned subsidiary of Material Service Corporation?

A Yes.

. . . .

[44] Q I would appreciate, sir, if you would check on the 1966 dividends of Freeman, which may or may not be indicated in Nugent Deposition Exhibit 8-A.

Now, Mr. Nugent, let's go back a little bit and try to get through quickly here the history of Freeman.

In 1953 or 1954 Freeman was a wholly-owned subsidiary or controlled by Material Service Corporation, is that correct, sir?

A Yes.

Q And it was headquartered here in Chicago?

A Yes.

Q And you were President at the time, sir?

A I don't recall. I have been President, I think for ten or twelve years. I would say perhaps so, either President or Executive Vice-President.

. . . .

[109] MR. HEDLUND: I think there may have been some confusion in the mine numbers, which Mr. Nugent—

MR. CUSACK: Off the record.

MR. HEDLUND: Let's stay on the record.

MR. CUSACK: All right, stay on the record.

MR. HEDLUND: —which Mr. Nugent may have used. I was not certain. I thought that there may have been some confusion between Orient No. 3 and Orient No. 5, but when we get the transcript back we can make sure.

MR. CUSACK: Certainly.

BY MR. CUSACK:

Q What I am trying to establish now, Mr. Nugent, is of the four Freeman mines now in operation, Orient No. 3, Orient No. 4, Orient No. 5 and the Crown Mine, and the Orient No. 6 Mine which will be in production in 1968, this year, which of these mines have unit train loading facilities?

A At the present time only Orient No. 5, and a unit train loading facility is being constructed at Orient No. 6.

Q Orient No. 6 and Orient No. 5 are both in the Southern Illinois Freight Rate District?

[110] A Southern Illinois Freight Rate District, yes.

Q The Crown Mine is located at Farmersville in Montgomery County, Illinois, is that correct, sir?

A Yes, sir.

Q That is about 30 miles south of Springfield?

A Approximately 25, I think.

Q Where does the production of this mine go?

A Two million tons a year, or a little less than that, goes to the Commonwealth Edison Company.

Q What destination, sir?

A It's usually shipped to Havana, Illinois, for loading into barges.

Q Havana is located on the river?

A On the river, on the C. & I. M. Railroad.

Q That is the Chicago and Illinois Midland?

A Chicago and Illinois Midland.

Q Is it then shipped by barge into the Chicago area?

A Yes, to Edison stations.

Q Do you know by any chance which particular stations it goes to?

A To all of them at one time or another.

Q To all of the facilities.

[111] MR. HEDLUND: To all of the river stations.

BY THE WITNESS:

A All of the river stations, of course.

BY MR. CUSACK:

Q The same stations served by United Electric through its barge?

A Yes, sir.

Q Barge line I should say.

A Yes, sir.

Q Through its production from Fulton County?

A The Buckheart Mine.

Q Could you tell us where most of the production of the Orient No. 5 Mine goes?

A It is pretty generally spread. We have started to ship on a unit train contract to the Union Electric Sioux Plant. It's not now moving at the rate of a million tons per year, and it will be moving at that rate at a later date, but in the meantime the movement of that coal is pretty widely spread.

Q Does any of this coal go into Wisconsin, for example?

A Yes, some of it does go into Wisconsin.

Q Could you tell me whether it goes up directly on rail to Wisconsin?

[112] A Up to the time that the Rail-To-Water Facility, or prior to the time that the Belt Railway was on strike, it moved over the lake to Wisconsin Electric Power, Wisconsin Public Service, and others.

Q Could you explain, sir, for the purposes of the record, just a little bit on how the coal goes? Does it go by rail from Orient No. 5?

A The coal would go by rail from Orient No. 5 by the Illinois Central Railroad, and it could go by other roads to Chicago. At Markham, Illinois, an Illinois Central transfer point, it's turned over to the Belt Railway. The Belt Railway carries it to a Rail-To-Water transfer facility. That is located at about 103rd street on the river.

The Belt Railway has been on strike some four weeks,

and movement has been interrupted and now the coal is moving elsewhere.

Q Could you give us some idea of the amount of the production of Orient No. 5 that ended up in Wisconsin in 1967?

A Well, it would be a guess because we put coal into Wisconsin Electric Power from all mines in Southern Illinois. Coal could move from 3, 4 or 5.

Q Orient No. 3, 4 or 5?

[113] A I don't have any direct knowledge as to how much came from each property.

Q But it does move from each of the three Orient Mines, Orient 3, 4 and 5, into the Wisconsin area?

A Yes, sir.

Q Does it go to Sheboygan?

A No, it goes to Oak Creek.

Q Where is that located, sir?

A Oak Creek is this side of Milwaukee.

Q Is it on Lake Michigan?

A On Lake Michigan.

Q Does Freeman supply any facilities in Wisconsin outside of the Lake Michigan Shore, other than at Oak Creek?

A You mean rail shipments to points?

Q Yes, sir.

A Yes, I'm sure we do, but I couldn't name the accounts to you. They may be small.

Q I see.

We have established that most of the production of Crown Mine goes by combination of rail and barge to Commonwealth Edison.

A Yes, sir.

[114] Q On its river-served plants.

A Yes, sir.

Q We have also established that Orient 5's production is fairly well distributed at the present time.

A Yes, sir.

Q Do you know if any of the Orient 5 production goes into Tennessee to TVA?

A Yes. I think it does, but not necessarily into Tennessee. It would go into the Shawnee plant on the Ohio River, just across from Joppa, Illinois.

Q In Kentucky?

A Yes. Most likely not in Tennessee, although it could move there.

Q In regard to Orient No. 5, are you serving the St. Louis metropolitan area with coal from Orient 5?

A Yes, sir.

Q Served actually in St. Louis in Missouri?

A Yes, sir.

Q Does any of your coal from Orient No. 5 go into Iowa, if you know?

A Yes.

Q What customers do you serve there by Orient 5?

A I couldn't call them to you by name, but [115] it's a natural market for us, and I'm sure that we do serve people in the market because we are competitive in the area.

Q In regards to Orient No. 4, could you tell us approximately where the production of this coal went in 1967?

A I think that you could say that Orient No. 4 moved in about the same manner as the coal from No. 5 moved, and in pretty much the same market.

Q If I may repeat, and correct me if I am wrong, it would then move into Wisconsin, Iowa—

A Yes, sir.

Q —St. Louis metropolitan area—

A Yes, sir.

Q —Western Kentucky—

A Not likely, no, sir.

Q Not likely.

A Only to the extent that it could move to the Shawnee plant of TVA.

Q —and into Illinois?

A And into Illinois.

Q In regard to the Orient No. 3 Mine, could you give us some idea of where the production of most of that coal would go in 1967?

[116] A Well, Orient No. 3 is a low sulphur coal, a specialty coal. It's moved into the St. Louis market, it's moved into—to people that require for one reason or another low sulphur coal, cement plant people, of course,

need low sulphur coal for special plants and special purposes, lime people, such as that. It has a broader market, however. It can move into the same market that Orient No. 5 and Orient No. 4 serve.

Q In regard to the 1967 production of the mines of Freeman, could you tell us if any coal moved into Minnesota from any of your mines?

A We can move into Minnesota competitively. It's at the extreme end of our market, and I can't tell you definitely that we did move coal there.

Q But you could have?

A We could.

Q Mr. Nugent, in regard to markets in coal generally, is it a fair thing to say that a coal company, as any business corporation, desires to maximize its profits? That is a fair statement, is it not?

A Yes. We try to make as much money as we can. We have to pay taxes to support this Justice [117] Department.

Q There is nothing reprehensible in this and this is a desirable thing to maximize profits.

A We certainly believe in the profit motive.

Q Insofar as the production and sale of coal is concerned, would it be a fair thing to say that there are two general costs involved, one being the cost of getting the coal out of the ground, processing it and sizing it and loading it—that would be one major cost, is that correct, sir?

A Yes.

Q The other major cost would be transportation, is that correct?

A Yes, sir.

Q Is it a fair statement to say that transportation costs are a very large percentage of the costs to deliver coal?

A I don't know that I would use the word "large", but it is an important factor in determining the area in which you can be competitive.

Q In regard generally to the experience that you had with Freeman and United Electric, what would be the average cost of delivered coal for your customers? What

percentage of that would be [118] attributed to transportation charges?

MR. HEDLUND: Are you asking for all customers?

MR. CUSACK: Just as a general rule.

MR. HEDLUND: A general average for all customers?

MR. CUSACK: Yes.

MR. HEDLUND: I would like to have the question read back, please.

Q (Read by the reporter.)

MR. HEDLUND: I am not certain that I understand the question, but if Mr. Nugent does, he may answer.

BY THE WITNESS:

A I don't know how that could be answered. The spread is too great. For instance, the rate to the Ohio River moving south to, say, the Shawnee plant, is in the neighborhood of a dollar.

A Is that a dollar a ton, sir?

A A dollar a ton. Obviously, that is not a large portion of the total delivered price. The rate into the Sioux plant on the unit train movement, again is a dollar. The rate to Chicago on a single car is very close to \$4. I think the rate to the [119] Rail-To-Water transfer facility—and I'm not up to date on my freight rates—I think it is in the neighborhood of \$2.15 to \$2.20 a ton, so you have a wide spread, depending on the movement and on the volume and the location.

Q Is it a fair statement to make, Mr. Nugent, that a coal company endeavors to sell as much of its coal as close as it can to its mines, because in this manner the cost of transportation is less than if they had to ship the coal great distances?

A Well, the cost of transportation is less, but I don't know that we make any particular effort to sell it nearby. The further you get away the more highly competitive—the further you get away from the mines, the more highly competitive the market becomes.

Q I see.

You mentioned in regard to the unit train price that you have \$1 a ton. This moves from Orient No.—

A No. 5 to the Sioux plant of the Union Electric Company. This figure must be approximate.

Q Yes, sir, I understand.

Is it a fair statement to make that with [120] the advent of the unit train rates, which as I understand is a fairly recent innovation in the coal mining business—

A Yes, sir.

Q —coal companies have been able to ship their coal economically much greater distances. Is that a fair statement?

A Yes, it is.

Q Is it also a fair statement to say that the greater the distance the coal is shipped the higher the transportation costs?

A Yes, sir.

Q Is it also a fair statement to say that with the advent of the unit train the distance to which coal can be shipped economically has been greatly increased?

A Yes, sir.

Q Does the shipment of coal by barge also enable coal to be shipped further distances economically?

A Not necessarily because, of course, you are limited to where you can go by barge, and water transportation has been more economical than rail transportation for quite some time, and barge operations [121] have been used for—transportation by river has been used for a great many years.

.

[181] Q Do industrial consumers of coal purchase coal for the generation by themselves of electrical power?

A No, I'd say not. On a rare occasion that might take place.

Q What do industrial users use coal for?

A Usually for processing in a plant. Power can generally be purchased cheaper than they can generate it, so—for instance, a corn products plant will use it for producing steam for processing purposes, and a cement mill will use it for burning limestone.

Q In your opinion, Mr. Nugent, who are the competitors of Freeman Coal?

A Well, the immediate competitors of Freeman Coal are the other producers in the Southern Illinois field. Now, to a degree, producers in the Belleville district do compete with producers of the Southern Illinois coal. There is little or no competition between the producers in the Belleville field and the producers in the Southern Illinois field. * * *

[190] Q You could have it blended at the destination of the customer?

A The customer at his own expense might blend it.

Q Does Union Electric blend any coal from the Belleville mining district and from the Southern Illinois mining district?

A I don't know that they do, but the Union Electric Company takes dust out of Southern Illinois, again a by-product, and it goes into the same plant, and they can blend it with Belleville if they choose to do so.

Q The same plant that is supplied by Belleville coal?

A Yes.

MR. CUSACK: Thank you.

MR. HEDLUND: Would this be a good place to stop, Mr. Cusack?

MR. CUSACK: Yes.

(WHEREUPON the taking of the deposition of FRANK NUGENT was adjourned to Wednesday, September 11, 1968 at 10:00 o'clock a.m.)

* * * *

[198] Q Mr. Nugent, the freight rate of the mines located within the Belleville District is less than that of the mines located in the Southern Illinois District for shipments into the St. Louis area, is that correct?

A Yes, sir.

Q Would you tell us approximately how much less on a carload lot?

A In the neighborhood of 12 to 15 cents a ton less from Belleville than from Southern Illinois.

Q Mr. Nugent, I assume that any mine in the Belleville District could ship to the Alton plant of Union Electric at as favorable a freight rate as that on which Freeman Orient No. 5 coal is shipped to the Alton plant, is that correct?

A Will you repeat that again for me, please?

MR. CUSACK: Will you read the question, please, Mr. Youker.

Q (Read by the Reporter.)

BY THE WITNESS:

A No more favorable rate has been published from the Belleville District than the existing rate from the No. 5 mine to the Sioux [199] plant.

BY MR. CUSACK:

Q In other words, Mr. Nugent, is it a fair statement to say that if a mine in a Freight Rate District with a generally less favorable tariff to a particular marketing area obtains a unit train rate, it can ship its coal cheaper than that coal mined in a Freight Rate District closer to that producing area?

A Not necessarily.

Q Will you please explain your answer.

A If the Sioux plant is on the Burlington Railroad, and since it is on the Burlington Railroad, the No. 5 mine is able to ship to the Sioux plant without involving any other railroad.

The Burlington Railroad does not serve mines in the Belleville District, so any movement from the Belleville District to the Sioux plant would necessarily be a two-line or perhaps a three-line haul.

[213] Q Is it not a fact, Mr. Nugent, that [214] the Commonwealth Edison Company does not purchase coal outside of the Eastern Interior Coal Province?

A This term "Eastern Interior Coal Province" is new to me in this case, but if by that you mean Illinois, Indiana and Western Kentucky, that is the usual area in which they do purchase coal.

Q Now, in regard to the Union Electric Company, Mr. Nugent, Nugent Deposition Exhibit 39-B indicates what to you in regard to Union Electric?

MR. HEDLUND: Mr. Cusack, I think the document speaks for itself. Now, I do not understand what you mean by the question, "What does it indicate to you?"

Are you asking him what the document shows? If so, I think the document speaks for itself.

MR. CUSACK: Mr. Hedlund, this document was prepared by Mr. Tarzy at the direction of Mr. Nugent. We would like to know what it means to Mr. Nugent, what does it indicate to him and what does it show to him in regard to the Union Electric Company.

[215] MR. HEDLUND: I submit that the document shows what it shows. The document shows figures for Illinois coal and for Midwestern coal.

MR. CUSACK: Off the record, please.

(There was a discussion off the record, after which the taking of the deposition was resumed as follows:)

MR. CUSACK: On the record.

BY MR. CUSACK:

Q Mr. Nugent, I ask you again to re-examine Nugent Deposition Exhibit 39-B, including the heading, including the statement on the top which has an asterisk and then the following statement:

"Denotes use of additional coal from sources other than Illinois, Indiana and West Kentucky."

I want you to examine this, please, sir, and tell us what this document means to you in regard to the listed utilities.

A Well, first, it may not be entirely accurate, and I do not know that the consumption figures indicated here-on are identical with those [216] filed with the Federal Power Commission by each of these utilities.

The figures were perhaps secured at a time when all the complete records were not available, so I assume that it is reasonably accurate but not necessarily so.

Now, as to the asterisk shown on here, where it denotes the additional coal from sources other than Illinois, Indiana and Western Kentucky, the TVA, for example, used, according to this report, 15,870,000 tons of coal, coal from the Midwestern field and coal from other sources.

Now, since the TVA has plants in Tennessee and uses Tennessee coal, obviously there is coal from Tennessee, Eastern Kentucky and perhaps West Virginia, that went into the TVA system.

Q Is this for the TVA Eastern Tennessee plants?

A Yes.

Q Is it a fair statement to say that the Eastern Tennessee plants of TVA are supplied by coal mined in Eastern Tennessee and Eastern Kentucky?

[217] A Yes, sir.

Q But that the TVA plants located in Western Tennessee are supplied from mines located in Western Kentucky and in Illinois?

A That is reasonably correct.

Q Is it fair to say from this statement, that is, Nugent Deposition Exhibit 39-B, that the coal consumed by Commonwealth Edison is produced mostly in the State of Illinois, that is, in 1963, 10,450,000 tons of coal mined in Illinois was consumed by Commonwealth Edison out of its total purchases of 11,350,000 tons?

A Yes, sir.

Q On the basis of this document, Mr. Nugent, do you feel that the public utility companies located in the State of Illinois purchase most of their coal from mines located in Illinois?

A Yes, sir.

Q Could you give us the reason for that, if you know?

A Basically transportation costs.

Q It is a fact, then, is it not, Mr. Nugent, that the coal producers with mines located in Illinois, Indiana and Western [218] Kentucky, that is, in mining Districts 9, 10 and 11, enjoy a favorable competitive advantage over coal mined anywhere else in the United States, in regard to customers located in Illinois, Indiana, Western Kentucky, Missouri, Southeastern Minnesota and most of Wisconsin?

MR. HEDLUND: May I have the question read, please.

Q (Read by the Reporter.)

MR. CUSACK: Together with Western Iowa.

(There was a short interruption, after which the taking of the deposition was resumed as follows:)

MR. EISEN: Mr. Nugent, I know that it might be helpful to you to be looking over Mr. Hedlund's notes, but it is really not appropriate in a deposition.

MR. HEDLUND: Let's show, then, what I have in my notes.

MR. EISEN: I am sure there was not any—

MR. HEDLUND: I will ask the Court Reporter to transcribe them in the record so that it is clear that I am not writing [219] notes and coaching Mr. Nugent.

MR. EISEN: I did not mean to indicate that you were.

MR. HEDLUND: I ask that the Court Reporter transcribe into the record what I have on that piece of paper.

MR. YOUKER (Notary Public): Let the record show that Mr. Hedlund has handed me a yellow sheet of paper on which appear the following inscriptions:

In the upper left-hand corner, "Freight Rate Districts", and two lines underneath that, "Unit rate possible", and two lines beneath that, "Joliet, arrow only R.R."

Each of those notations has an arrow preceding it, pointing to the right.

In the upper right-hand corner there are two columns of what appear to me to be abbreviations.

The left-hand column appears to read as follow:

"Ill. No.

Ia.

Minn.

Wisc.

Ind.

W.Ky.

W.Penn."

[220] The right-hand column appears to read as follows:

"Ohio

Penn.

E. Ky.

W. Va.

Va."

Below those two columns appear two other columns. The left-hand column bears at the top an inscription that looks like "Prod.", and beneath that appears:

"Ill.
Ind.
W. Ky."

To the right of that column appears at the heading the word "Customers." There appears to be a word to the left of "Customers", "mined", and a line may be drawn through it or not, I am unable to decipher.

Underneath those two inscriptions appear:

"Ill.
Ind.
W. Ky.
Mo.
SE Minn.
Most of Wisc.
W. Iowa",

with a line drawn beneath them.

MR. HEDLUND: Mr. Nugent, if you [221] would like to take notes during your interrogation, you have the right to do so. There are paper and pencils here.

THE WITNESS: That is a very involved question and a long question. May I have a piece of paper to write something down?

MR. HEDLUND: Yes.

(There was a short interruption, after which the taking of the deposition was resumed as follows:)

THE WITNESS: Now, would you repeat the question, please?

Q (Read by the Reporter.)

MR. CUSACK: And Western Tennessee.

(There was a short interruption, after which the taking of the deposition was resumed as follows:)

MR. CUSACK: Please take your time, Mr. Nugent.

BY THE WITNESS:

A This is a rather involved question, and I think it could be simply stated in this fashion: I would like to state it in my own language and see if I have correctly inter- [222] preted it.

The question is, do the producers of coal in Illinois, Indiana and Western Kentucky have an advantage in serving customers in the Middlewest as against producers in fields other than Illinois, Indiana and Western Kentucky?

Is that the question in brief?

MR. CUSACK: You may answer that question.

BY THE WITNESS:

A Yes. The producers in Illinois, Indiana and Western Kentucky do have an advantage over producers in other districts in the territory that you have outlined.

BY MR. CUSACK:

Q What I am trying to delimit, Mr. Nugent, is the general borders of the area in which the Midwestern producers, that is, the producers operating mines in Mining Districts 9, 10 and 11, have an advantage over coal produced in other districts.

A Yes.

Q I think we established, at least in [223] regard to the TVA utility plants located in Tennessee, that the TVA plants located in Eastern Tennessee were supplied with coal by mines located in Eastern Tennessee and in Eastern Kentucky, while the TVA plants located in Western Tennessee were supplied, by and large, with coal produced in Western Kentucky and in Illinois.

A Yes, sir.

Q I am trying to delimit, somewhat at least, the boundaries here. Now, in regard to the boundary of Western Kentucky, that is, Western Kentucky being an area where customers located within Western Kentucky are served by the coal produced in Western Kentucky, Illinois and Indiana. Is that correct?

A Would you restate that, please?

MR. CUSACK: Will you read the question, please, Mr. Youker.

Q (Read by the Reporter.)

BY THE WITNESS:

A I am confused with that. I think that indicates that Indiana coal or Illinois coal is used by customers in Western Kentucky. Is that [224] the question?

MR. CUSACK: Yes, sir.

BY THE WITNESS:

A The word "customers" plural, would indicate somebody other than TVA.

Now, the TVA has a plant, the Shawnee plant, which is located in West Kentucky, but I know of no other plant in Western Kentucky that is served by producers in Indiana and Illinois.

BY MR. CUSACK:

Q Is the only large consumer of coal in Western Kentucky the Shawnee plant of TVA?

MR. HEDLUND: You had better state what you mean by "large."

BY MR. CUSACK:

Q Do you know of any customers for coal located in Western Kentucky who consume, on a yearly basis, over 50,000 tons of coal a year?

A I know that there are customers in Western Kentucky that consume more than 50,000 tons of coal a year.

Q Other than TVA?

A Yes.

Q Would you name them, please.

[225] A I cannot name all of them. The industrial complex near Calvert City, I am sure, has several plants that consume tonnage in that area, the Louisville Gas & Electric Company, and I am sure there are many others.

Q In regard to these customers located in Western Kentucky, where do their coal requirements come from?

A Generally speaking, from Western Kentucky.

Q And some from Illinois?

A Again, I think the Illinois tonnage is limited to coal that goes to the TVA plants.

Q Now, again, Mr. Nugent, trying to delimit somewhat the areas in the Middlewest where coal produced in Mining Districts 9, 10 and 11 has a competitive advantage, let's discuss the State of Iowa.

Could you please tell us what portion of Iowa, in your opinion, uses coal, most of which is mined within Illinois, West Kentucky and Indiana?

MR. HEDLUND: I would like to have that question read, please.

[226] Q (Read by the Reporter.)

BY THE WITNESS:

A The Eastern half of Iowa.

MR. CUSACK: Thank you.

BY MR. CUSACK:

Q In regard to the state of Minnesota, will you tell us that portion of Minnesota which, in your opinion, uses coal which is mined within Illinois, Indiana and Western Kentucky?

A In Minnesota?

Q Yes.

A Those plants in Minnesota that are served on the Mississippi River and served by barge, secure their coal from the Belleville District, with some dust and carbon in limited quantities moving to perhaps some plants on the river.

The plants in Minnesota, in the northern part of Minnesota, are served off of the Lake Superior docks with coal from Lake Erie ports, eastern coal from Lake Erie ports.

Q So it is a fair statement to say that the coal mined in the Midwest would not go north of the southeastern portion of Minnesota, but [227] would serve that area?

A A better way to say it would perhaps be that coal from the Belleville District is used primarily at points on the Mississippi River in Minnesota, and there is very little other Illinois coal that moves into utility plants in Minnesota.

Q Does not coal mined from the Fulton-Peoria Mining District also go into plants in Minnesota?

A No, sir.

Q None at all?

A I know of none.

Q In regard to the State of Wisconsin, could you tell us the areas in Wisconsin where Midwest coal, that is, coal mined in Illinois, Indiana and Western Kentucky, has a substantial competitive advantage over coal mined anywhere else?

A With the exception of some coal shipped to Lake Michigan ports from Lake Erie ports, to plants such as Wisconsin Electric Power, Wisconsin Public Services and so forth, most of the coal that is used by utility plants [228] in Wisconsin comes from mines in Illinois, Indiana and Western Kentucky.

Q Thank you.

In regard to the state of Indiana, could you tell us that portion of Indiana where customers are located, which customers use coal mined in Illinois, Indiana and West Kentucky?

A Again, most of the coal that is used by utilities in the state of Indiana is produced by coal mines in the state of Indiana.

[229] Q Does Illinois coal go into Indiana?

A Yes, in that portion of Indiana which is included in the Chicago Switching District, Hammond and Gary, and there is some Illinois coal that has gone into the NIPSCO plant over there on Lake Michigan.

Q Would you spell "NIPSCO", please?

A Northern Illinois Public Service Company.

Q NIPSCO means Northern Illinois Public Service Company?

A Yes, sir.

Q Doesn't some Indiana coal go into Illinois?

A Yes, sir.

Q Could you tell us where it goes in Illinois?

A Well, Indiana coal moves over the northern part of Illinois. It is competitive.

Q With Illinois coal?

A Yes, sir.

Q In regard to the State of Missouri, Mr. Nugent, could you tell us that portion of the State of Missouri

where customers are located, in which Midwest coal, that is, coal mined in [230] Illinois, Indiana and western Kentucky, has a competitive advantage?

A First, there is some coal mined in the State of Missouri, and I think most of the coal that is mined in the State of Missouri is used by utility plants in the State of Missouri.

Very little Illinois coal is consumed in Missouri by utilities at points west of the Mississippi River.

Q The Union Electric Company, which is a St. Louis-based public utility company—is that correct?

A Yes.

Q It purchases all of its coal from Illinois, does it not?

A Yes, sir.

Q Is not Illinois coal superior to Missouri coal?

A Yes.

MR. HEDLUND: In what respect?

MR. CUSACK: He answered the question.

BY THE WITNESS:

A I presume you are talking about quality?

MR. CUSACK: Yes.

[231] BY THE WITNESS:

A Yes.

BY MR. CUSACK:

Q It is a superior quality coal?

A Yes, sir.

Q Mr. Nugent, is it a fair statement to say that most of the coal consumed in Illinois is mined in Illinois?

A Most of the coal consumed in Illinois is mined in Illinois?

Q Yes.

A Yes. I think that is a fair statement.

Q Thank you.

Mr. Nugent, I would like now to discuss a little bit with you the competition, or at least the potential competition between the mines operated by United Electric and the mines operated by Freeman.

We established yesterday, did we not, that the Fidelity mine of United Electric is approximately thirty-five miles to the west of the Freeman Orient No. 3 mine, the Orient No. 5 mine of Freeman, and the Freeman Orient No. 4 mine, is that correct, sir?

* * *

[232] Q Is that located on the Mississippi River?

[233] A The Ohio River.

Q Has that plant been served by the Fidelity mine of United Electric?

A Yes.

Q Has that plant also been served by any of the Freeman mines?

A Yes, sir.

Q In your opinion, then, Mr. Nugent, would the Fidelity mine of United Electric be in competition with the Freeman mines for the business of the Shawnee plant of the Tennessee Valley Authority?

A No, sir.

Q Will you please explain your answer?

A Freeman entered into a contract with the TVA and by agreement with United Electric Coal Companies, we included the Fidelity mine so that if at any time they needed to dump some coal or if they had coal that could not be disposed of on the market place, they would have a right to apply it on that market, and it was only necessary for them to apply a very limited tonnage.

It is not a piece of business that they could enjoy profitably.

Q The coal that the Fidelity mine of United [234] Electric sold to the Shawnee plant was sold at a profit, though, was it not?

A I am not so sure that it was.

Q What is your best recollection with respect to that, Mr. Nugent?

A I would say that it was a very marginal piece of business for them, and it was something that they would only use in an emergency situation.

Q Is this because the Fidelity mine of United Electric has better customers?

A It is because the transportation cost is not competitive.

Q Mr. Nugent, is it not a fact that United Electric had a contract to supply TVA with coal?

A Yes, sir.

Q Was this coal from the Fidelity mine?

A Yes, sir.

Q Did United Electric bid on this contract?

A I believe it was a joint bid.

Q By United Electric and by Freeman?

A Yes, sir.

Q As a result of this joint bid and contract, coal from the Fidelity mine of United Electric as well as from the southern Illinois mines of [235] Freeman moved to the Shawnee plant of TVA?

A Yes, sir.

Q Mr. Nugent, the Banner mine of United Electric is located where, sir?

A On the Illinois River, not too far south of Peoria.

MR. CUSACK: Let the record show we are handing Mr. Nugent Mr. Jack Simon's map, which is Nugent Deposition Exhibit 38.

BY MR. CUSACK:

Q Mr. Nugent, when was the Banner mine of United Electric opened?

A Oh, I cannot recall specifically. It was several years ago.

Q With reference to coal mined at the Banner mine of United Electric, is it loaded onto barges at the mine?

A Yes, sir.

Q Is it a fact that the preparation plant is located contiguous to the Illinois River?

A Yes, sir.

Q Is the Banner mine of United Electric a profitable operation?

A Yes, sir.

[237] BY MR. CUSACK:

Q Mr. Nugent, I now hand you Nugent Deposition Exhibits 40-A, 40-B and 40-C for identification, and ask you to examine them, please.

(There was a short interruption, after which the taking of the deposition was resumed as follows:)

BY THE WITNESS:

A Yes.

BY MR. CUSACK:

Q Do you recall receiving this document, sir?

A Again, I am sure that you would not expect me to recall a document that I received in 1960, but since it is addressed to me, I am sure that I did receive it.

MR. CUSACK: Let the record show that it is not addressed to Mr. Nugent. It is addressed to Mr. Paul Weir, with a copy to Mr. Frank Nugent, President, Freeman Coal Mining Corporation.

BY MR. CUSACK:

Q Mr. Nugent, I ask you to examine Nugent Deposition Exhibit 40-A, in regard to the contracts for coal produced at the Banner mine.

[238] A Yes.

Q With reference to the Wisconsin Electric Power Company contract at Port Washington, Wisconsin, this is, is it not, for 50,000 tons of coal?

A Yes, sir.

Q The Wisconsin Electric Power Company plant at Port Washington, Wisconsin is located on Lake Michigan, is it not, sir?

A Yes, sir.

Q You testified yesterday, did you not, that Freeman supplied some coal to a utility plant in the State of Wisconsin located on Lake Michigan?

A If you are asking me if I testified that Freeman ships coal to the Wisconsin Electric Power Company on Lake Michigan, if you asked me that question, I am sure I said that we do.

Q What plant of the Wisconsin Electric Power Company do you ship to?

A Wisconsin Electric Power Company to Port Washington and to Oak Creek.

However, the coal is ususally consigned to Oak Creek and it only goes to Port Washington at the convenience of the Wisconsin Electric Power Company.

[239] Q—I see. Now, the Oak Creek plant of Wisconsin Electric Power is located how far from the Port Washington plant, do you know?

A The Port Washington plant—Port Washington, as you know, is just to the north of the city of Milwaukee and Oak Creek is to the south of the city of Milwaukee.

Q What mine or mines of Freeman supplies the Oak Creek plant of the Wisconsin Electric Power Company?

A All of Freeman's Southern Illinois mines.

Q That is Orient No.—

A 3, 4 and 5.

Q Mr. Nugent, is the Banner mine of United Electric in competition with Freeman for the business of the Wisconsin Electric Power Company?

A No, sir.

Q Would you please explain why?

A The coal representing this tonnage of 50,000 tons—

MR. HEDLUND: Let the record show that the witness is referring to Nugent [240] Deposition Exhibit 40-A.

MR. CUSACK: Yes.

BY THE WITNESS:

A Exhibit 40-A before me indicates that there was a contract with the Wisconsin Electric Power for a one-year period for 50,000 tons of coal.

That coal had to be transported to Chicago by barge and transferred from the barge to a lake vessel. There is only one lake vessel equipped to handle a movement of this nature, and that is the steamer Roen, R-o-e-n, I believe it is.

It is a very unsatisfactory arrangement because of the time element involved. You have to have the barges there in time to meet the vessel, and a fleeting of barges, and it is slow and costly.

I think the cost of transporting coal through the use of the Roen as against the use of the rail-to-water facility, where a vessel can be loaded in a few hours as against

days for the Roen, is more than double and perhaps three times as costly.

[241] BY MR. CUSACK:

Q But it is a fact, is it not, that United Electric and Freeman both sold coal to Wisconsin Electric Power Company?

A In the year of 1960, and I do not believe that United Electric has shipped any coal to the Wisconsin Electric Power Company since that time and they are not shipping any coal in that fashion because the steamer Roen is not available to them.

Q Who has the steamer Roen tied up?

A Roen is using it for other purposes. It was not a satisfactory movement for him.

Q Do any of the Freeman mines ship to Ludington, Michigan?

A I think we have shipped some coal in the past to Dow Chemical, but in limited quantities.

Q But you have made shipments to Dow Chemical at Ludington?

A No. I cannot say that we have. I would have to check the records.

.

[251] Q For Freeman?

A Yes.

Q Mr. Nugent, in your opinion, is the coal produced by United Electric from the Cuba, Buckheart and Banner Mines in competition with the coal produced by the Crown mine of Freeman for the business of the Commonwealth Edison Company?

A Will you restate that, please?

MR. CUSACK: Will you read the question, please, Mr. Youker?

Q (Read by the reporter.)

BY THE WITNESS:

A That word "competition" troubles me. If the coal were available in Fulton County in sufficient quantity and if they chose to make the price to secure the business,

coal from the Crown mine would not move to Edison's river stations.

BY MR. CUSACK:

Q But it does move, does it not?

A It does, yes, because the quantity of coal is not available in the Fulton County field to meet Edison's needs.

* * *

[281] Q Did Freeman have any other salesmen working out of any other office than your Chicago office and your St. Louis office?

A No, sir.

Q Do you recall the names of any other salesmen of Freeman working out of the Chicago office?

A Yes. Jack Sheridan and Joe Zwickle.

Q Is Mr. Sheridan still employed by Freeman?

A Mr. Sheridan and Mr. Zwickle are both employed.

Q By Freeman?

A By Freeman.

Q All right.

A We have a man named Edwards up in Wisconsin, Gene Edwards, the name is.

Q Where does he work out of, sir?

A He works out of—I don't know where he makes his headquarters in Wisconsin.

Q He solicits customers of Freeman located in Wisconsin?

A That is right.

[282] Q Among which is Wisconsin Public Service Company?

A No. I do not believe he handles that account. Sheridan handles that account.

Q Do you know where Mr. Edwards lives?

A I am not sure, but I think Mr. Edwards lives at Eau Claire, or nearby.

Q What other salesmen do you recall worked for Freeman in 1966?

A Well, we had a half a dozen other country salesmen whose names do not come to my mind now.

Q You have six country salesmen. Could you give me—

A I do not know that it was six. I think we had eighteen to twenty people all told in our Sales Department.

Q You have testified that Mr. Edwards handled some of your Wisconsin accounts.

A Yes.

Q Can you give us generally some of the areas covered by some of your other country salesmen?

A We have a man in central Illinois, [283] traveling that territory, Frank Keller. We operate a retail yard in Springfield and he runs the retail yard and he handles the Wholesale business in that territory.

* * * *

[299] Q Is it a fact that United Electric's [300] largest customer was, by far, the Commonwealth Edison Company, in 1965?

A Yes, sir.

Q Who was Freeman's largest customer in 1965?

A The Commonwealth Edison Company.

Q Having reference to Nugent Deposition Exhibit 45-B, could you tell us how many tons of coal Freeman sold to Commonwealth Edison Company in 1965?

A 1,540,320 tons.

Q Was Commonwealth Edison Company the largest customer of Freeman in 1965?

A Yes, I think it was.

Q In 1965, who was the second largest customer of Freeman?

A The Tennessee Valley Authority.

Q Now, Mr. Nugent, I ask you to look at Nugent Deposition Exhibit 44 and tell us how many tons of coal were sold by United Electric in 1965 to the Union Electric Company.

A In 1965 the Union Electric Company purchased 485,870 tons from the United Electric Coal Companies.

* * * *

[304] MR. CUSACK: On the record.

BY MR. CUSACK:

Q Mr. Nugent, at what point in time did the salesmen of Freeman and the salesmen of United Electric stop soliciting common customers?

MR. HEDLUND: May I have the question read, please.

Q (Read by the Reporter.)

MR. HEDLUND: When did you stop beating your wife?

MR. CUSACK: If they did.

MR. HEDLUND: Ask a proper question.

BY MR. CUSACK:

Q Mr. Nugent, do you know whether or not the salesmen of Freeman and the salesmen of United Electric solicited the same customers?

A The salesmen for Freeman and the salesmen for United Electric are continuing to solicit the same customers.

Q Have they solicited prior to the merger?

A Yes.

Q These are common customers?

A In the case of the Union Electric Company, [305] Mr. Davis still handles the shipments of Freeman coal to Union Electric and Mr. Croak still handles the shipments of United Electric.

In the case of the Commonwealth Edison Company, Mr. Tucker and Mr. Gebhart continue to handle the business of the Commonwealth Edison Company, and Mr. Butler and—I think he gets some help from somebody else, perhaps Hamson, still handle the United Electric Company.

Q Now, Mr. Nugent, you testified yesterday with regard to the opening of the Orient No. 6 mine of Freeman. Where, sir, is that located generally?

A Orient No. 6 is due east of Orient No. 3.

Q Would that be located in the DuQuoin Freight Rate District?

A Right here (indicating).

MR. CUSACK: Let the record show that the Orient No. 6 mine is located slightly to the west of the Chicago

Eastern Illinois Railroad, which is to the east of the Orient No. 3 mine.

[332] MR. HEDLUND: We will so stipulate. I am not certain that 4064 is a page number, but perhaps it is. It certainly is some sort of numbering of these minutes. I will stipulate that these are minutes from the meeting held on October 28, 1960, by the Board of Directors of The United Electric Coal Companies.

MR. CUSACK: Thank you.

BY MR. CUSACK:

Q Mr. Nugent, does this refresh your recollection in regard to the approximate date when these merger discussions were going on?

A Well, this seems to me to have to do with the purchase of a 1650-B shovel.

Q I direct your attention, Mr. Nugent, to the middle of the page.

A Oh, yes. Yes, I recall that.

Q Do you recall what company was involved, sir?

A The Truax-Traer Coal Company.

Q It states in paragraph three of Nugent Deposition Exhibit 49:

[333] "The Chairman stated because of conversations in the past in regard to possible consolidation with another coal company in this area, it might be well to give some consideration to the subject."

Mr. Nugent, who was the chairman referred to in Nugent Deposition Exhibit 49?

A I believe at that time it was Kolbe.

Q Frank F. Kolbe?

A Yes. I am not too sure about that, but I think Kolbe was there then.

Q Do you know any reason why Messrs. Falkoff, Morris and yourself did not vote on this resolution?

MR. HEDLUND: To which resolution are you referring?

MR. CUSACK: I am referring to the resolution on the bottom part of the page which reads:

"Resolved that a committee composed of Messrs. Nugent, as chairman, Falkoff and Morris be and hereby are appointed to serve at the pleasure of this Board to investigate and report to this Board concerning such consolidation."

[334] BY THE WITNESS:

A I presume it must have been a degree of modesty. Perhaps we did not want to vote for ourselves on the committee.

MR. CUSACK: Thank you.

BY THE WITNESS:

A I must say, however, that I am not that modest.

BY MR. CUSACK:

Q What happened, Mr. Nugent, in regard to these discussions with Truax?

A I spent a great deal of time on that with Harold Truax and we employed the Paul Weir Company to make an evaluation of both properties.

They got a report from Weir and we got a separate report. We reached a basis of exchange of 1.45 shares of Truax-Traer stock for each share of United Electric stock. That was on the basis of the Weir appraisal and the Truax-Traer people just would not accept it.

Q United Electric was to be the surviving company?

A United Electric was to be the surviving company.

[335] Q Was it contemplated that the management of United Electric would be in charge of the company after its acquisition by Truax?

A Yes, it was.

Q So this was really a discussion of United Electric acquiring Truax, was it not?

A It was a discussion of United Electric acquiring Truax, but I believe it was initiated by Harold Truax.

Q He came to you to essentially sell his company?

A Exactly.

Q Were these discussions had with the knowledge of Colonel Crown of Material Service?

A Yes, sir.

Q And with his concurrence?

A Yes, sir.

Q Were these discussions had with the concurrence of the General Dynamics people in New York?

A Well, these discussions had taken place prior to this time, perhaps two or three years prior to this time, and I do not recall the reason for these minutes, because I believe it failed at just about this time.

* * *

[336] Q You were in charge of the discussions?

[337] A (Nodding head "Yes".)

Q Your answer is "Yes"?

A Yes.

Q Mr. Nugent, you went on the Board of United Electric in October, 1959, did you not?

A I think that is right.

[338] Q And you did not start discussing the acquisition of Truax by United Electric until you went on the board of United Electric, did you?

A I may have had some informal discussions with Harold Truax prior to that time.

Q Thank you.

Did Mr. Kolbe, incidentally, disapprove of the acquisition of Truax by United?

A On the contrary, he was most anxious.

Q Do you know why?

A Well, Mr. Kolbe was a substantial holder of United Electric stock.

Q Thank you.

A I think he owned 25,000 shares.

Q Mr. Nugent, do you recall the acquisition by United Electric of some coal reserves in an area in McDonough and Schuyler Counties, Illinois, referred to by the United Electric as the Industry Field?

A Yes.

Q Do you know, sir, when United Electric began acquiring coal reserves in the Industry Field?

[339] A Quite sometime back.

Q Could you give us an approximation?

A When I first became interested in United Electric, I thought it was an unwise investment, and it was dis-

cussed at the board meetings right after I went on the board.

Now, I think at that time that there was something like \$800,000 in land, money invested in land, so I would assume that it must have taken a good many years to acquire that much land.

Q So when you got on the board of United Electric, which was in the fall of 1959, up to that time United Electric had spent about \$800,000 to acquire reserves at the Industry Field—

A Yes.

Q —is that correct, sir?

A Yes.

Q Could you give us some general idea where the Industry Field is located in reference to the Fulton-Peoria District?

A Industry Field is south of the Buckheart—Cuba properties, quite a distance there. It is [340] quite a distance from the river.

It is eight miles away from the Burlington Railroad. The thought was that it would go to the river, where, as a matter of fact, United Electric could take coal out of the Belleville District, move it to the river, and bear in mind that the Belleville operators, through the Kellogg dock, have a 45 cent rate to the river, so it can move to the river for 45 cents and up the river a barge rate could have been negotiated for less than the published rate, but on the published rate the coal could be set down at a point where Industry would be loaded on the river for considerably less money than it could be produced and transported to the river from the Industry Field.

Q Is the Industry Field—

MR. EISEN: You did not mean to say "Industry" there, did you, sir? You mean, it could have been loaded easier from—

BY THE WITNESS:

Q From the Belleville District, transported to the river on the 45 cent rate and then up the river and to a point on the river near the [341] Industry Field, a logical point for loading, and you could do that for less money

than you could deliver the coal from the Industry Field to the river.

BY MR. CUSACK:

Q Has United Electric continued to hold coal reserves at the Industry Field?

A Yes. As of that date the policy was to continue to acquire coal in the Industry Field as it became available, but at farm prices, and we did require some additional acreage at farm prices and we are farming it.

Q That is, after 1959, when you went on the board of United Electric?

A Yes.

Q Your answer is "Yes"?

A Yes, sir.

Q Prior to that time United Electric had made acquisitions of land and reserves at the Industry Field at over farm prices?

A Yes, sir.

Q Would you please explain the difference?

A I think that is not a particularly productive farming area and land was available at [342] about \$125 per acre.

With coal land such as that, of course, if it were better located and with an overburden not nearly so high—I think the ratio there is 30 or 35 to 1—it might be different, but this was a most uneconomical proposition and a most unwise investment.

Q Whose idea was it to acquire the Industry Field?

A I am afraid that I cannot identify anybody particularly in the management of United Electric who was responsible for it, but I believe the minutes will indicate what my position was.

Q Did Mr. Kolbe agree to United Electric acquiring coal reserves at the Industry Field?

A I think that Mr. Kolbe, of course, was in charge of the management and I am sure that he approved of the purchase.

Q Mr. Nugent, if the Industry Field is, in your opinion, a very unwise investment and has been a very unwise investment for United Electric, why, since the time

you have been on the board of United Electric, has the board of [343] United Electric continued to pick up reserves at the Industry Field at farm prices?

A At farm prices we can make some money farming it. We are grazing cattle on it.

Q You do not have any plans, then, to ever mine this coal?

A I do not believe that the Industry Field will be mined until such a time as all of the commercially mineable coal in Fulton County is exhausted.

Q And when will this happen, do you know?

A United will be out of there in another ten or twelve years and Truax will not be far behind.

They have perhaps enough acreage for a mine in the North Canton field, but they have already abandoned the Little Sister property, and they have one property left. Their production in the field has been reduced.

Banner will be through in another half a dozen years or so, so the field is going out of business pretty rapidly. One day perhaps coal can be mined and it can be sold. There are only twelve million tons of reserves there, so—
[344] Q Excuse me. Sold from Industry, you mean?

A Sold from Industry, but it will present a problem in that there are only twelve million tons of reserves, and it is not enough to justify moving in and building a washing plant, so we would have to find a customer that will buy raw coal.

Q Does the Industry Field have No. 2 coal, sir?

A It is No. 2 coal of good quality.

Q That is the same coal as at the Banner mine?

A Yes.

Q What does the BTU on an unwashed basis run for the Industry Field?

A It will run on the high side, and I do not think we have sufficient drill holes to give you a proper answer on that.

Q Can you give me an approximate answer?

A It might be 10,000 BTU on the raw side.

Q And on the washed side what would it run?

A About 12,000.

[345] Q What is the sulphur content, do you know?

A The sulphur will be high.

Q Are there any mines in the Industry Field area or near the Industry Field area now in operation?

A Republic Coal & Coke or Ayshire Collieries, the operating company, has the Sun Spot mine closer to the river.

Q How far away from Industry?

A It is a considerable distance away from Industry, and it is on the Burlington Railroad. The overburden ratio I do not think is high, and they have a larger deposit of coal.

Q Do you know how much of a deposit?

A No, I do not, not exactly.

Q Assuming that United Electric wanted to pay a little bit more money than farm prices for expansion of the Industry Field, could it acquire further reserves at the Industry Field?

A Not of any consequence.

Q That is the—

A That is about all there is there.

Q That is the extent of the field?

[346] A That's about the extent of the field.

Q Has it been drilled sufficiently to make that determination?

A Yes, sir, it has.

Q You said that in order to operate the Industry Field, it would have to be raw coal, that is, unwashed coal?

A Yes, sir.

Q Who buys unwashed coal in Illinois?

A The utilities could use it.

Q Don't they buy most of the coal in Illinois?

A Well, I think at a time when the Buckheart, Cuba and Banner mines are gone, anything that can be mined nearby perhaps can be sold.

Q Would this include the Industry Field?

A Yes. This would be probably twenty years from now, a rather poor investment, \$800,000, carrying it for thirty years before you utilize it.

Q Do you have any idea how much United Electric has spent on Industry Field since 1959, when you went on the board?

A Not very much, because there was not [347] much available.

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[361] BY MR. CUSACK:

Q Mr. Nugent, who are the competitors of the Freeman Coal Mining Corporation?

MR. HEDLUND: I think you should also, in that connection, start talking about for which customers where. If Mr. Nugent is able to answer that question, however, he may do so.

BY THE WITNESS:

A The competitors of the Freeman Coal Mining Corporation on southern Illinois coal are those producers in southern Illinois, western Kentucky and Indiana, and to a degree producers in the Belleville District.

Competitors of Freeman in central Illinois are producers in central Illinois and Fulton County, and to a limited extent coals from other fields that can reach Edison's market.

MR. CUSACK: Thank you.

.

[373] Q Mr. Nugent, when was substantial strip mining first undertaken in Illinois?

A Oh, way back. Prior to 1900, I think. I presume that is what you are talking about, when you say "substantial"—well, I just do not know what you mean by that, but let's say that coal was stripped in the early part of the century.

Q In the early 1920's Mr. Nugent, when you first became active in the coal business, was there substantial strip mining being conducted in Illinois?

A The strip mine tonnage was then, of course, percentage-wise far less than it is today, of the total production in the state.

Q In the early 1920's would the strip production in the State of Illinois be about 10 percent of the total production?

A I would not guess as to the percentage.

Q It is now over half, is it not?

A Yes, sir, it is.

Q Directing your attention to the 1920's, when you first became active in the coal business, what was the maximum depth to which a strip mine could strip coal?

A Around 20 to 25 feet.

[374] Q That is the furthest down they could go?

A (Nodding head "Yes.")

Q "Yes"?

A Yes, sir.

Q At the present time what is the maximum depth which a strip company can go down to mine coal?

A I would say that perhaps 125 feet would be the outside figure, and location would determine as to whether or not that could be profitable. It would be most costly. Anything over 80 feet begins to become costly.

Q What are the reasons, Mr. Nugent, if you know, why the depth to which the strip companies have been able to go has increased over the years?

A Well, as the shovels have gotten bigger, we have been able to handle more overburden, but it has its limitations in that you have to maintain a spoil bank and the angle of repose needs to be such that you can maintain a pit of adequate width for loading coal.

Q Although I know what you mean by your statements, Mr. Nugent, I think it might be helpful for the record if you will just explain that a little [375] bit further.

A I think perhaps it is simpler to say that no matter how big the shovel is, how many yards you take, it is the distance that you can throw it or cast it that is important.

Q Because of the spoil bank?

A The spoil bank will roll in on you.

Q On the pit where the mining equipment is located?

A Where you are digging the coal.

Q Is it a fact that 20 years ago a 70 yard cubic bucket size on a shovel was unheard of?

A I think that is true. I do not think there was such a thing 20 years ago.

Q What are the sizes of the buckets on the shovels now, sir, do you know?

A Well, I was just trying to think. I think 180 yards. I think there is one shovel of 180 yards, although I am not sure.

Q Mr. Nugent, what are the projections or predictions by knowledgeable people in the coal industry in regard to the depth that you will be able to strip in the next ten years?

A I think we have reached our maximum now. [376] First, with reference to the coal that is available to strip, I think the Belleville district has gone about as far as they can. There is only one virgin piece of land left there and that is the Denmark acreage.

All the rest of the strip land in the State of Illinois is under development so that the equipment necessary to mine that coal is already in place.

Now, the Denmark acreage is not a high overburden coal, so I would see no need for placing a larger shovel in the State of Illinois, because the acreage is not available.

Q Who owns the Denmark acreage, sir?

A Ayrshire Collieries.

Q Do they contemplate mining it, do you know?

A I presume some day.

Q Is it your opinion then, sir, that in fact Illinois is running out of strip reserves?

A I am positive that in the State of Illinois, to repeat, every piece of coal that will be mined by the stripping method is now in the process of development but one, and again that is Denmark.

Q Would this include the Industry Field?

[377] A I do not consider Industry Field at this time commercially mineable.

Q It has been estimated, Mr. Nugent, that there are twenty-two billion tons of strip reserves located in the State of Illinois and that these strip reserves are recoverable.

A Yes, sir.

Q Do you agree with that figure?

A I do not think I have heard that figure before, and I do not know where it came from. If I knew the author, I would know whether I could accept it or not.

MR. CUSACK: Off the record.

(There was a discussion off the record, after which the taking of the deposition was resumed as follows:)

MR. CUSACK: On the record.

BY MR. CUSACK:

Q Mr. Nugent, we have handed to you and to your counsel a booklet entitled, "Stripping-Coal Resources of the United States, Geological Survey Bulletin 1252-C," by Paul Averitt, printed by the United States Government Printing Office, Washington, 1968.

[378] A Yes.

Q I direct your attention to page C7 in regard to Illinois, which states in pertinent part:

"On the basis of work completed and in progress, J. A. Simon (written commun., Sept. 28, 1966) has concluded that the remaining stripping-coal resources of Illinois as of January 1, 1966, in beds 18 inches or more thick and at a maximum depth of 150 feet, totaled 21,223 million tons. Simon also concluded that the original resources within the same parameters totaled about 23,000 million tons."

I ask you on the basis of this statement, Mr. Nugent, whether you agree with the estimate of, according to this document, Mr. Simon in regard to the stripping-coal reserves of Illinois?

A I believe I wrote Mr. Simon a letter sometime back, asking him to give me his views on commercial strip coal available in the State.

I think at the same time we sought the view of Paul Weir, a very competent man in this field, and I think that the views of Mr. Simon and Mr. Weir are not in conformity with the views as [379] stated here, and particularly the tonnage that is involved.

* * * *

[388] Q Did you discuss with Mr. Mullins the [389] coal reserves situation in Illinois?

A No, sir.

Q In other words, your conversation with both Mr. Mullins and Mr. Kelce was just general discussions which would have no bearing on the issues of this lawsuit?

A That is right.

Q In regard to your conversation with Jack Simon of the Illinois State Geological Survey, Mr. Nugent, what did Mr. Simon tell you in regard to the availability of strip reserves in Illinois?

A I called Jack Simon's attention to the map, and I think in about the same manner—

Q Just a moment, please, sir.

A Yes.

Q You are referring to Nugent Deposition Exhibit 38?

A Yes.

Q The map of shipping coal mines in Illinois?

A Yes.

Q All right.

A I called Jack Simon's attention to the [390] map I think in about the same manner that Paul Weir called his attention to the map when he was a speaker at an Illinois Mining Institute in Springfield, when he publicly indicated to Dr. Simon that the map was most confusing and that a much better job could have been done on it.

We talked about the confusion that has arisen because of the inadequacy of the map, the fact that he has shown huge reserves of strip coal that are in fact not there, the fact that he shows as strippable coal, coal that is under towns and communities and buildings and so forth, where obviously it could not be stripped, and Dr. Simon's answer to that is that the map was intended to be just general in nature and used for exploratory work, and was never intended to indicate the coal that was commercially mineable in the state.

Q Thank you.

In regard to your conversation with Paul Weir, what did Mr. Weir say to you?

A Mr. Weir and I jointly deplored the fact that such a map had been made, and that certainly it does nothing but create confusion [391] and adds nothing to the benefit of the industry.

Q Are you upset, Mr. Nugent, over Mr. Simon's map, which is Nugent Deposition Exhibit 38—

A No.

Q (Continuing)—or are you upset in regard to his estimates of strippable coal reserves?

A We are upset—I do not know that that is the word. I am not upset with Dr. Simon. The map has been in existence for some time, and I do not know that he is entirely responsible for it.

Confusion has arisen about the use of it by people who are not knowledgeable in the business, and I must include you in the Justice Department in that group.

Q I appreciate your comments.

A Well, I am a coal man and you are a lawyer, and I think maybe I would do better in the coal business than you would do, and you would do better in the law business than I would.

Q Thank you.

[392] Did you talk to Mr. Buchanan of Old Ben Coal Corporation in regard to the strip reserve situation in Illinois?

A No. Mr. Buchanan is not knowledgeable in that area.

Q What did you talk to Mr. Buchanan about?

A Mr. Buchanan and I have been very close friends for a great many years. We play golf together and we go to lunch together, and it is a long-standing relationship, ever since he has been in the coal business.

Q You are a close friend of Tom Mullins' too, are you not?

A I have known Tom Mullins for a great many years, and I have known Merl Kelce for a great many years.

Merl Kelce and Tom Mullins and I have had lunch together and exchanged views, we have labor problems and other problems, and we have much in common.

Q With whom did you speak at Ayrshire Collieries in connection with this lawsuit?

A I have talked to Norman Kelb. I [393] think Norman Kelb is the only one I have talked to at Ayrshire Collieries.

Q Did Mr. Kelb express an opinion to you in regard to the availability of strip reserves in Illinois?

A Let me answer that in this way, Mr. Cusack, and maybe it will save some time: The people who are in the business, knowledgeable, as I said before, such as Mr. Kelce, Mr. Mullins and Norman Kelb, are thoroughly familiar with the strip acreage that is available in this state, and there is not any necessity for any conversation between me and people in the business as to whether there are strip reserves available. The question is not debatable, we know that they are not there, so there just isn't anything to discuss.

That goes down to cub engineers who have just been in the business a couple of years. There is not a utility man in the state buying coal, a knowledgeable utility man, who does not know that the strip reserves are not available.

[394] There is not a salesman selling shovels and equipment who does not know that the reserves are not available. They have a keen interest in it. The Caterpillar Tractor Company are knowledgeable in that area. They know the reserves are not available. Their sales programs are directed elsewhere because the reserves are not here.

This is not a question that is debatable among coal people. It is an accepted fact that reserves are not here.

Q The Humble Oil Company, though, you testified, was able to buy some substantial reserves in Illinois, is that correct?

A Underground coal.

Q There are substantial amounts of underground coal available in Illinois?

A Substantial reserves or acreages of underground coal, we understand, have been acquired by people associated with the Humble Oil Company.

The reserves that they have acquired in most cases were reserves that were rejected by commercial operators.

[396] Q Would you consider, Mr. Nugent, the Round Prairie Field of United Electric to be an adequate area of underground coal reserves, an adequate deposit of underground coal reserves?

A The Round Prairie Field is an adequate reserve of underground coal that can be commercially mineable and at a time when it is not necessary for that field to compete with the lower cost strip coal that can be produced in the same area, such as Fidelity and River King and so forth.

Now, it would be unreasonable to expect that you could go underground and mine coal in the Belleville District in an area where there is a massive limestone structure on top of the coal, where the full extraction system cannot be used, and where you can only expect to get 50 to 55 per cent of the seam, and compete with mines in southern Illinois where the full extraction system is usable and where you can recover 93 to 95 per cent of the coal, and of course, at a lower cost and with a better [397] quality.

Q When do you expect that the Round Prairie field will be commercially mineable?

A As I said before, there is only one deposit of virgin coal in the Belleville field, and that is the Denmark acreage.

In time the strip mines such as Fidelity will be exhausted and other mines will be exhausted and then it will be possible to develop the Round Prairie field.

Q When do you expect this to take place?

A Well, as you know, Fidelity will go out of the picture in ten to twelve years. Some of the other mines will go out at about the same time.

Q Some of the other mines in the Belleville District?

A Yes.

Q The strip mines?

A Yes. I do not know what the life is of River King, but River King is digging a lot of coal and you know they can't go on forever.

Q River King is operated by Peabody, is it not?

[398] A Yes, sir.

Q Do you expect, then, that as the strip reserves acreage in the Belleville District is exhausted, that the

operators in the Belleville District will open up underground mines in the Belleville District?

A Only those that own acreage, such as the Peabody Coal Company in the Belleville District.

The next mine that Peabody opens in the Belleville District will probably be an underground mine.

Q But United Electric has underground acreage in the Belleville District.

A Yes, but unfortunately it is not located on the Kaskaskia River, as is the acreage that belongs to the Peabody Coal Company.

Q But it is located close to rail transportation, is it not?

A That is not sufficient to compete. As you well know, the Kaskaskia River is being canalized, and the only companies that own land on the Kaskaskia River are the Peabody Coal Company and the Kaiser people, Kaiser Aluminum [399] Company.

Virtually all of the acreage belongs to those two companies. I think, since you are acquainted with the Peabody Coal Company situation, you know they have entered into an arrangement for a mine-mouth plant with the Illinois Power Company at a point near Baldwin, Illinois, for underground coal.

Now, if they can put that coal into the river, with no transportation cost to the river, and the other Belleville operators have a transportation cost to the river of 45 cents, if they can put it into the river at virtually no cost, then they can compete, since they have an edge of 45 cents.

Q What about the Big Muddy Creek situation, insofar as Beaucoup field is concerned?

A Big Muddy and Beau Coup Creek does not have any money allotted to it and it is not likely that it will be developed, and if it is developed, and by the time it is developed, it will have no value to the Fidelity mine. It will be exhausted by then.

Q Assuming that the Beaucoup Creek is [400] canalized in the next twenty years, would this increase the attractiveness of the Beaucoup field and the Round Prairie field?

A It could have some benefit.

Q Would it have a substantial benefit, do you think?

A No. I am not quite sure how close Beaucoup Creek comes to the Round Prairie field. I do not believe it is very close to it.

MR. CUSACK: Will counsel stipulate that Beaucoup Creek runs immediately to the west of the Round Prairie field?

MR. HEDLUND: Not at this time.

MR. KEMPF: May we go off the record for a moment?

MR. CUSACK: Yes.

(There was a discussion off the record, after which the taking of the deposition was resumed as follows:)

MR. CUSACK: On the record.

BY MR. CUSACK:

Q Is it not a fact, Mr. Nugent, that the Round Prairie field is located between Beaucoup Creek and Little Beaucoup Creek in [401] Perry and Washington County, Illinois?

A It is very close to it, but I have no knowledge as to how far it is intended that Beaucoup Creek be canalized.

[402] Q I see.

A I do not think the original plan provided for going up that far. But, Mr. Cusack, Beaucoup Creek and Big Muddy is a pipe dream.

Q It has not been funded, in other words?

A No.

Q Mr. Nugent, do you expect the demand for bituminous coal to increase over the next ten or fifteen years?

A That is very difficult to say. We have some very serious competition from nuclear power.

Q Would you characterize the market for coal, for the production and sale of coal in Illinois and in the Midwest, as a sellers' market?

A No. I wouldn't think so.

Q Is it a fact that Freeman can sell every ton of coal it mines?

A It is a fact that Freeman does sell every ton of coal that it mines, but Freeman does not make an adequate return on its invested capital.

[411] Q Is it a fact, though, that for example, the 1967 annual report of the state of Illinois Department of Mines and Minerals does present accurately the production of coal in Illinois by the various mines operating in Illinois?

A Yes, it does, since we are required by the State Mining Act to report to that department accurately the number of tons of coal we produce each year.

Q Is it your opinion that these reports are accurate in regard to the production of coal?

A Yes, it is.

Q By the various companies operating in Illinois?

A Yes, sir.

Q Mr. Nugent, is it your position that The United Electric Coal Companies was derelict in acquiring sufficient strip coal reserves?

A I do not know that I would use the word "derelict", but I believe that they were not aware of the seriousness of their situation until it was much too late.

Q Is it your testimony that after you became a member of the board of United Electric, [412] you made concerted efforts to acquire sufficient strip reserves?

A Yes, it is.

Q And did you do this?

A Will you restate that again? I do not know that my answer fits the question.

MR. CUSACK: Read it, please Mr. Youker.

(The record was thereupon read by the Reporter as above recorded.)

THE WITNESS: All right.

BY MR. CUSACK:

Q Mr. Nugent, is it your opinion that Mr. Kolbe did not foresee the need to acquire sufficient strip coal reserves?

A I do not want to seem to be critical or unkind to Mr. Kolbe, he is a very fine person, and I do not know that I would charge Mr. Kolbe with that responsibility.

I think that his Operating Department and people who are knowledgeable in that area should have been aware

of the situation, and I would be more inclined to criticize them than I would to criticize Mr. Kolbe.

[413] Q What are the names of these operating people, sir?

A Going way back, he had some very competent people. He had a fellow named Hepburn.

Q Mr. Hepburn is now dead, is he not?

A He is dead.

Q All right.

A Prior to that he had a man named Morrison, and he had a very able man prior to Morrison, who is now dead, and his name slips my mind.

Q Was Mr. Morrison an able man, in your opinion?

A I did not know him well enough to make a judgment. He came in here from Canada and he was not knowledgeable in the area.

Q Was Mr. Hepburn, in your opinion, an able man?

A He was, but at the time he headed the Operating Department, it was then much too late.

Q What about Mr. Morris?

MR. HEDLUND: "Morris", did you say—

THE WITNESS: Morrison?

MR. HEDLUND: —or "Morrison"?

[414] MR. CUSACK: Mr. Morris.

BY THE WITNESS:

A Mr. Morris was vice-president in charge of sales, and I think that he was greatly concerned over a great many years about the inadequacy of the strip reserves, as were many other people associated with The United Electric Coal Companies.

Their sales department could not help but have their attention called to the inadequacy of reserves by the utility people upon whom they were calling.

BY MR. CUSACK:

Q Mr. Nugent, when you went on the board of United Electric, which you testified was in the fall of 1959, did you realize then that in your opinion United Electric had insufficient coal reserves?

A From the time I attended the first board meeting, I do not believe that I failed to bring that subject up at any board meeting that I attended.

Q So your answer to my question is "Yes", then?

[415] A Yes, sir.

Q And this was a matter that seriously concerned you?

A Yes, sir.

Q In the light of the total operations of United Electric, how serious, Mr. Nugent, did you think the problem was in 1959 and in 1960?

A Without strip reserves, the company obviously was in liquidation.

Q Why then, Mr. Nugent, did your employers continue to make substantial acquisitions of stock in United Electric?

A Because we had underground reserves available so that United Electric could enter into a long term contract with a supplier to run out the reserves that they had.

Without the underground reserves to back them up, they are in no position to mine coal on the last day that those reserves are available, and those people who are buying coal from United are not going to wait until the end of United's reserves to make arrangements for their fuel supply.

Q Is it not a fact, Mr. Nugent, that [416] Material Service Corporation and its successor in interest with regard to United Electric, General Dynamics Corporation, continued to acquire substantial amounts of stock in United Electric?

A Yes, sir.

Q In fact, in 1966 it purchased 100 per cent of the outstanding stock of United Electric, is that not correct, sir?

A Yes, sir.

Q And this was done even in the light of your fears in regard to United Electric's strip coal reserve position, is that correct?

A Yes, sir.

Q Did you ever advise General Dynamics or Material Service not to acquire any more stock in United Electric?

A No, sir, for the very reason that we acquired the first shares of stock, because we realized that The United Electric Coal Companies was a coal company in the process of liquidation and that they had to be identified with somebody that had underground reserves that could be made available to them so that they could remain a [417] viable entity in the market.

Q Are you saying that Material Service Corporation and General Dynamics Corporation bought stock in United Electric as a method of helping United Electric survive?

A Yes, sir.

Q Is it not a fact that General Dynamics Corporation and Material Service Corporation purchased stock in United Electric because they considered it an excellent investment?

A I would not say that, no.

Q Do you remember—

A When—

MR. HEDLUND: The question has been asked and answered.

THE WITNESS: What?

MR. HEDLUND: The question has been asked and answered.

MR. CUSACK: If you would like to continue, it is perfectly all right with me.

THE WITNESS: Go ahead.

BY MR. CUSACK:

Q Do you consider, Mr. Nugent, the purchases of stock by Material Service Corporation [418] and General Dynamics Corporation in United Electric to have been a good investment?

A Yes.

Q It has been, has it not, an excellent investment?

A Yes, sir.

Q Is it not a fact, Mr. Nugent, that at the time in 1966 when General Dynamics acquired all of the shares

of United Electric, United Electric had over \$6,000,000 on its treasury which was transferred to General Dynamics?

A Yes, sir.

Q Is it a fair statement to say that United Electric, at the time of the acquisition by General Dynamics, was a very liquid company?

A Yes, sir.

Q And also a very highly profitable one?

A Yes, sir.

Q You testified that General Dynamics expected to help United Electric in regard to underground reserves. Do you mean that General Dynamics expected to supply United Electric with underground reserves?

* * *

[420] Q Thank you.

Mr. Nugent, did United Electric have a budget for the acquisition of coal reserves?

A You say, "did United." When do you mean?

Q At the time you became a director in 1959.

A No, sir, they did not.

Q Was a budget instituted after you became a director?

A Yes, sir.

Q How much was budgeted, can you tell us, in 1960, for example, for the acquisition of coal reserves at United Electric?

A I do not believe we set any sum aside, but it was made clear to the management that all of the money necessary would be made available for the acquisition of reserves.

Q At the present time, Mr. Nugent, will General Dynamics make available to United Electric all funds necessary for the acquisition of strip coal reserves?

[421] A Commercially mineable strip coal reserves, yes.

Q Wherever located?

A Wherever located.

Q Including in the state of Colorado?

A Including the state of Colorado or anywhere else where it can be mined commercially.

Q In the last twelve months has United Electric acquired any substantial coal reserves in Colorado?

A No, sir.

Q Arizona?

A No.

Q Utah?

A No.

Q New Mexico?

A No, sir.

Q When you speak of commercially mineable coal, Mr. Nugent, are you speaking about commercially mineable coal at the present time or ten years from now?

A Either now or ten years from now. By commercially mineable, we mean coal that we can mine and make a profit.

[422] Q Either now or in the foreseeable future?

A Yes, sir.

MR. CUSACK: I suggest that we take a few minutes' recess, gentlemen.

MR. HEDLUND: All right.

(Whereupon a short recess was taken, after which the taking of the deposition was resumed as follows:)

MR. CUSACK: On the record.

BY MR. CUSACK:

Q Mr. Nugent, do you know of any coal producers in Illinois who were previously strip miners that now operate an underground mine?

MR. HEDLUND: I believe that question was asked on interrogatories and answered, was it not, Mr. Cusack?

MR. CUSACK: I do not recall specifically.

MR. HEDLUND: Let's check.

MR. CUSACK: I would still like to ask him if he knows of his own knowledge.

MR. HEDLUND: Let's see if in fact that question was not asked and if in fact Mr. Nugent answered it.

. . . .

[424] Q Yes, sir.

A I do not know of any strip operator that has opened up a shaft or a slope mine in the state of Illinois.

Q What about Truax-Traer, Mr. Nugent?

A Well, they have been in underground mining for many, many years.

Q In Illinois?

A In Illinois. Their Burning Star mine has been in existence for a long period of time.

Q Where is Burning Star located?

A It is out of business now. It was down in the Belleville District. They worked it out, so it is that old.

Q Are there a number of companies that operate underground—

A Let me say, too, about the Truax-Traer Coal Company, at the time that the Truax-Traer Coal Company was stripping in Illinois, they were operating underground mines in the Dorothy field in West Virginia. They were very competent in the underground area.

.

[431] Q Based on your knowledge, Mr. Nugent, of the financial condition of United Electric, would United Electric be able to borrow money to open up an underground mine?

A I think they would have considerable difficulty, because first they certainly would not open up an underground mine, unless they had the coal sold before they opened the property, and it would be difficult for me to believe that a utility company or any other large buyer of coal would be willing to enter into a contract with a company with no experience in that field and one without a staff, when coal is available and underground mines can be opened up by producers that are in the business and competently staffed and with adequate capital and reserves.

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[436] Q Mr. Nugent, you have testified as to your concerted efforts, once you became a member of the board of directors of United Electric, to obtain additional coal reserves for United Electric.

A Yes.

Q Were those efforts successful in obtaining any new field of strip coal reserves?

A No, sir. Did you say, in Illinois?

Q No. I did not. I did not qualify it.

A Well, we did acquire some strip reserves at Hayden, Colorado, in the early 1960's.

MR. CUSACK: Is that Hayden County, Colorado?

BY THE WITNESS:

A No; the town of Hayden, Colorado.

MR. CUSACK: That is Routt County, is it not?

BY THE WITNESS:

A Yes.

. . . .

[16]

EXCERPTS FROM DEPOSITION OF
NICHOLAS T. CAMICIA,
TAKEN SEPTEMBER 17, 1968

* * *

Q Going west from the east coast along the Appalachian range roughly, just west of the Appalachian range, there is a long strip indicating coal producing area there, is that right?

A Yes.

Q How is that designated in the industry, if you know?

A There are several designations.

Q Various districts, is that it?

A Yes; various coal districts. The southern part of Virginia and western part of Virginia, that particular area is called the Pocahontas Field.

That is where all of the Pocahontas low volatile metallurgical coals are found in the United States.

Q Is there a general description for that like the Eastern Province?

A It is called the Appalachian Field.

Q The Appalachian Field?

A Yes. That includes all the way from Pennsylvania down into Alabama.

Q Going west from there, there is a [17] area covering about two-thirds of the State of Illinois and about the southwestern one-third of Indiana and a corner of Kentucky.

A Yes.

Q How is that designated in the industry?

A We call that the Midwest Field, in layman's language.

Q Then west of that, roughly spreading out maybe fifty to two hundred miles either side of the line along the borders of Nebraska, Iowa, Kansas and Missouri is another field, is there not?

A Yes.

Q What is that called?

A I do not know. It is not talked about very much in the industry because there is not very much coal mining there.

Q Is the Midwest Field also referred to as the Eastern Interior Coal Province?

A I have never heard that name.

[31] Q You indicated that when you were at Island Creek, you had experience in operations, and I think you referred to the methods as drift, low seam and float, is that right?

A I referred to the types of mining that we had as drift, slope—

Q Was that "slope"?

A And shaft.

Q Was that "slope"?

A Yes.

Q Did you use the term "low seam"?

A We had low seam mining and middle seam and thick seam mining.

Q Yes.

A That refers to the height of the seam of coal we are mining.

Q Could you explain these terms briefly to us?

A Such as what? Which terms?

Q Well, "drift" was one of them.

A Well, a drift mine is a mine that—in West Virginia, principally, is where this type of mining is done.

Because of the mountainous terrain the [32] seams outcrop or appear on the periphery of the mountain tops, and a drift mine is one where you just have to go directly into the mountain, as distinguished from a slope mine which is below the creek level or water level, and you must slope down to it, as distinguished from a shaft mine which is deeper down and it is not feasible to use a slope to get to it, you must go with a shaft because the slope does not lend itself to a seam that is lower down into the ground.

Q All of these could be classified or would be classified as underground mining methods?

A They are all underground mining, yes.

Q Would any of these methods be applicable to any of the Illinois coal?

A Well, two of them are, the slope mine and the shaft mine.

Q United Electric has a coal field designated as Round Prairie Field, does it not?

A Yes.

Q Would any of these methods be appropriate for the mining of Round Prairie Field?

A Yes. It would either be slope or shaft, and perhaps slope at that depth.

[33] Q At that depth, you are referring to an underground mine that is fairly shallow?

A Well, it is not shallow. It is at the point that a slope mine, which is cheaper to put in than a shaft mine, it is at that point in depth that you can utilize the slope rather than the shaft.

Q What savings can you effect by using slope rather than shaft?

A Well, the savings are in the construction of the slope as compared to the construction of a shaft.

It is easier and cheaper to sink a slope than it is to sink a shaft, and the equipment required to bring the coal out is much more expensive in a shaft operation than in a slope operation.

Q How do you bring it out of a slope mine as distinguished from a shaft mine? What kind of equipment do you use?

A In a slope mine you sink your slope at an angle at which a belt conveyor is able to traverse up the slope and bring the coal out, and that usually is limited to a seventeen degree slope.

In a shaft mine, of course, you must use [34] a big hoist and a head frame and skips to bring the coal out of the shaft.

Q What are the conditions that exist at Round Prairie which indicate to you that you could not possibly use this slope technique?

A The only indication is that it is 250 feet deep, and that would immediately, to any knowing mining man, indicate that the most economical way to reach that seam of coal would be by the slope means.

Q In terms of costs, or however you would like to express it, the cost per ton in removing coal or whatever you use in the business, how much of a saving can you effect by using slope in preference to shaft?

A Compared to shaft?

Q Yes.

MR. KEMPF: Does the witness understand that this is under identical conditions?

MR. EISEN: Yes.

BY THE WITNESS:

A I was going to stipulate that myself.

MR. EISEN: All right.

[40] Q Have you made any studies or had any material prepared with a view to estimating the cost of putting in a slope mine at Round Prairie?

A We have not had any detailed engineering studies, no. I have looked at it myself [41] from a general standpoint, knowing the depth of the coal, the height of the coal and the bore hole readings, and I can pretty well determine about what the cost would be, and it would be similar to some of our southern Illinois mines.

Q There you are referring to the Freeman mines?

A Freeman, yes.

Q Would it be your testimony that the coal mined, if and when it was mined at Round Prairie, would compete with coal in the southern Illinois area?

A No, it would not compete with southern Illinois coal, because of the quality. That is one reason.

The second reason is that from our bore hole readings we know that this coal in the Round Prairie area has a roof condition that may not be surmountable.

Q What is that, sir?

A The limestone in the Round Prairie area comes right down against the coal, which precludes pillar mining, or room and pillar [42] mining, or full extraction of the seam. I could go into a long dissertation on that, but I do not think you would understand it.

Q We may have to do it, sir, if you can do it briefly. I think I may get back to that later, so you can be thinking about it. I will ask just one more question in that regard and we will get back to it later, because I am still just going over your experience.

With respect to a limestone roof, is it your testimony that that is a poor roof condition or a good roof condition?

A It depends on what you are talking about. A limestone roof is so solid that after you try to extract the coal from underneath the roof, it will not collapse or fall, and for that reason it throws the weight over on to your workings and causes what we call squeezes, which is where it pushes the bottom up into the workways that we have or the entries and the rooms we are trying to work, and it would cause considerable difficulty.

On the other hand, when you have a limestone roof, you can do partial mining and [43] do all right at it, but you are not extracting very much coal and the cost of development becomes prohibitive then.

You have good mining while you are developing, but you are spending a lot of money because of the belt you have to put in there to extend your workings, and then you are not recovering any of this pillar coal I am talking about. You spend all the money to get there and then you don't get anything for it.

Q Counsel will correct me if I am wrong, Mr. Camicia, but I think that Mr. Nugent indicated in his testimony, or estimated that there could be a 55 per cent, I believe he said, recovery—

A That is right.

Q —at Round Prairie.

A Which is very nominal. That is not good recovery. It is very poor recovery.

Q What is the percentage recovery at the Crown mine?

A The Crown mine is 55 per cent because it is under farm land. The recovery at Orient No. 3 is 95 per cent, the southern Illinois [44] mine.

* * * *

[46] Q I believe you testified that Island Creek Coal did not have any strip operations.

[47] A That is right.

Q You have just indicated now that you met Mr. Kolbe when UEC was stripping some coal for Island Creek.

A Yes. We had some property in eastern Kentucky that we thought might lend itself to what we call contour

mining in that part of the country. There is no such thing as strip mining.

Contour mining, as distinguished from strip mining, is mining around the top of a mountain in contour, around the mountain, and going back in to the seam until it is uneconomical to get any more.

Q Did you do any contour mining yourself, that is, Island Creek?

A No, we did not.

Q So I take it that you had this relationship with United Electric because of their particular know-how?

A Their know-how and the fact that they had the equipment and we did not want to invest that much money into an operation that we knew nothing about. We couldn't take that gamble.

Incidentally, our judgment was very [48] good on that because United Electric lost money on it, too.

.

[52] Q Yes.

A From a personal standpoint, I thought it was a good thing that I would have the opportunity to be exposed to strip mining and learn something about it.

Q Was it good in the sense that it would give Freeman an advantage over being an exclusively underground operation, to also have strip mining operations?

MR. KEMPF: What kind of an advantage are you talking about?

THE WITNESS: Yes.

MR. EISEN: If he understands the question, I will ask him to answer it.

BY THE WITNESS:

A From an operating standpoint, I would say that there is a definite advantage.

.

[77] Q What percentage of UEC's sales are to [78] accounts that Freeman also sells?

A I have no idea.

Q How about the reverse? Do you know what percentage of Freeman's sales are to accounts that UEC sells?

A No. I have no idea.

Q Mr. Camicia, I am going to suggest to you, in an effort to refresh your recollection, some of the common customers which, it has come to our attention, are served by both UEC and Freeman, to see if it accords with your knowledge.

With respect to Commonwealth Edison Company, our information is that 25 per cent of Freeman's sales are to Commonwealth Edison and 29.4 per cent of UEC's sales are to Commonwealth Edison Company.

MR. KEMPF: Would the reporter read back those figures, please.

(The record was thereupon read by the reporter as above recorded.)

BY THE WITNESS:

A I would think that is about right.

BY MR. EISEN:

Q With reference to the Tennessee Valley Authority, Freeman sells 15.2 per cent of its coal [79] to TVA and UEC 4.87 per cent to TVA.

A I do not know about that one at all. I do know that both of them sell some coal to TVA. I do not know the amounts.

Q Where is that coal delivered?

A I do not know that.

Q You have no knowledge whatsoever, or you do not know the specific place?

A I do not know the specific place. If I heard it, I might know it.

Q Is that delivered in Kentucky?

A Yes.

Q Shawnee, Kentucky?

A That is not the name. It is near there, though.

Q Near Shawnee?

A It is in the extreme western part of Kentucky, I know that.

Q And both—

A On the Ohio River.

Q That is a receiving point for both Freeman and UEC coal?

A Yes.

Q With reference to Illinois Power Company, [80] Freeman sells 4.5 per cent of its coal and United Electric sells 3.4 per cent.

A That sounds correct.

Q With respect to Union Electric Company, Freeman sells 4.1 per cent of its coal to Union Electric and UEC sells 9 per cent of its coal to Union Electric Company.

A Are you talking about 1967, or currently, or are you quoting—

Q I will fill in that date for you in one second.

(There was a short interruption, after which the taking of the deposition was resumed as follows:)

BY MR. EISEN:

Q The figures I have been referring to, Mr. Camicia, are the figures for 1965.

A 1965.

Q I believe you said that sounds about correct in each instance—

A Yes.

Q (Continuing) —so I assume that is approximately correct, the figures I have been quoting to you.

A Yes.

[81] Q If there are any changes as I read these off that do not correspond with 1966 or 1967, or even present sales, would you so indicate?

A Well, the only change I would suggest is that for Union Electric our current sales on an annual basis from Freeman are more like a million tons a year, which would be 12 per cent, or something, of our production.

Q Does UEC maintain at about 9 per cent?

A About the same, as I said, yes.

Q With respect to the Marquette Cement Company, 2.6 per cent of Freeman's sales are to Marquette Cement, and 5.1 per cent of UEC's 1965 sales were to Marquette Cement. Would that accord with your knowledge and recollection?

A I am pretty sure of Freeman but I am not certain about the percentage for UEC to Marquette. It sounds like it might be right.

MR. KEMPF: Off the record.

(There was a discussion off the record, after which the taking of the deposition was resumed as follows:)

MR. EISEN: On the record.

[82] BY MR. EISEN:

Q 2.6 per cent of Freeman's 1965 sales were to the Central Illinois Public Service Company at Springfield, and 3.6 per cent of UEC's 1965 sales were to the Central Illinois Public Service Company at Meredosia and Grand Tower.

A Yes.

Q Does that remain the same?

A I agree with that, yes.

Q Are there any other companies that I have not mentioned to whom both UEC and Freeman sell? Let me ask you this first: Are there many small accounts, or could there be many small accounts that they both might sell that you would not recall right now? Are there such?

A I do not know of any. I do not recall any.

Q You do not know of any others, other than those I have named?

A No.

Q Has UEC solicited any customers of Freeman, other than the ones I have named here, and been unable to effect a transaction of sale?

MR. KEMPF: May I have that read back, please, Mr. Youker.

[83] Q (Read by the reporter.)

BY THE WITNESS:

A I do not know that they have.

BY MR. EISEN:

Q Does Freeman sell to Inland Steel?

A Yes.

Q How about UEC?

A No.

Q Freeman sells both steam and metallurgical coal to Inland Steel?

A No. Only metallurgical coal.

Q Only metallurgical coal.

A Yes.

Q The total figures I get from what we have read here is that approximately 54 per cent of Freeman's 1965 sales were to customers that were also sold by UEC and 60 per cent of UEC sales were to customers also sold by Freeman.

Do you have a figure which you have in mind, based on your day-to-day experience in the company, which you could suggest would be closer than that?

A I have never thought of it in that light, but from the figures you have mentioned, and if they [84] add up to that, then I have no reason to question them.

Q Would you say that the percentage has been increasing, the percentage of sales, to common customers of the two companies?

A No. I do not think so.

Q Other than that one increase to Union Electric that you mentioned?

A Yes. No, I do not know of any others.

Q What type of coal does Freeman sell to Commonwealth Edison?

A They sell their Central Illinois Coal, which is principally a steam generating coal, utility coal.

Q That is from the Crown mine?

A Yes.

Q Is any Southern Illinois coal sold to Commonwealth Edison?

A No; not any of our Southern Illinois coal.

Q What kind of coal does UEC sell to Commonwealth Edison?

A To Commonwealth Edison?

Q Yes.

A They sell their strip coal from their [85] Buckheart mine, which is a utility coal.

[107] Q Could you list the competitors of Freeman for us?

MR. KEMPF: Competitors of Freeman in the coal industry or in the nuclear industry? In what context are you talking about competitors?

MR. EISEN: In the coal industry.

BY THE WITNESS:

A In the coal industry?

MR. EISEN: Yes.

BY THE WITNESS:

A Peabody, Truax-Traer or Consolidation Coal Company, Bell & Zoller, Sahara, Ayshire. Did I miss any?

MR. CUSACK: What about Zeigler?

BY THE WITNESS:

A Bell & Zoller, yes, or Zeigler. I thought I named Bell & Zoller.

BY MR. CUSACK:

Q One is a parent of the other?

A Yes. I don't know which is which. I call it Bell & Zoller. They are operating mines.

BY MR. EISEN:

Q Southwestern?

A Yes.

[108] Q Do these same companies also compete with United Electric Coal, or if any of them do not, or if there are others you would like to add, we can take them one at a time, if you wish.

A Are you talking about United Electric in relation to these other competitors?

Q Yes.

A Peabody, yes. Bell & Zoller, yes. Sahara, no. Truax-Traer, yes. Southwestern, yes.

Q You did not mention UEC as competing with Freeman.

A Yes.

Q And does Freeman compete with UEC?

A Yes.

Q How can they compete when they are both owned by the same company?

A They do.

Q Are all of your mines able to sell coal beyond the Freight Rate District in which they are located?

A Are all of them able to?

Q Yes.

A Yes.

Q That is, both by UEC and Freeman?

[109] A Yes.

Q Would you have an idea of what percentage of the Freeman mines' production is sold in the district where each mine is located?

A Are you talking about districts or are you talking about—

Q Freight Rate Districts.

A Freight Rate Districts?

Q Yes.

A It would be small. I would have to look at a map, if I may.

Q I am going to show you a document which has previously been identified as Nugent Deposition Exhibit 38, I believe.

A Yes.

(There was a short interruption, after which the taking of the deposition was resumed as follows:)

THE WITNESS: Now, if you will repeat the question for me, concerning Freight Rate Districts, I think I understand it, but I would like to have it repeated.

MR. EISEN: Would you read the question, please, Mr. Reporter.

* * *

[126] MR. HEDLUND: What is the question pending? Is there a question pending?

MR. EISEN: Yes, there is.

MR. HEDLUND: May I have that, please, Mr. Youker?

Q (Read by the reporter.)

BY THE WITNESS:

A That is a natural understanding of competition, rivals.

BY MR. EISEN:

Q That is the way businessmen use the expression every day, isn't that right, in the conduct of their business?

A Yes.

Q So in that regard, does the Peabody mine in the

Fulton County area compete for Commonwealth Edison business with the Crown mine?

A I do not know that you would call it competition. Insofar as Commonwealth Edison can get their coal from Peabody, Crown would not be competition at all.

You can call them competitors only to the extent that the supply of coal in Fulton County is not sufficient to meet the needs of Edison, so they [127] have to go beyond that area someplace to get the coal.

Q Does Commonwealth Edison pay a premium, do they pay more per BTU to Crown than they do to Peabody?

A I don't know what they pay Peabody.

Q Do they pay more for Crown mine coal per BTU than they do for Buckheart coal per BTU?

MR. KEMPF: Just a minute, please. May I have the question read, please, Mr. Youker?

Q (Read by the reporter.)

MR. KEMPF: Are you talking about their end cost per BTU delivered, through their own facilities and things like that, or are you talking about F.O.B. mine, or what?

MR. EISEN: The witness has the question.

MR. KEMPF: If the witness understands the question, he may answer.

BY THE WITNESS:

A I do not recollect what the prices are. My recollection is that the F.O.B. prices are similar on a BTU basis. I do not know about the delivered prices.

BY MR. EISEN:

[128] Q Would you say that they were the same?

A Similar; almost the same.

Q By "almost", you mean what? One or two cents a ton?

A Within a few cents, yes.

Q Could you describe how the location of present and potential customers of UEC affects its ability to compete?

MR. KEMPF: Will you read the question, please, Mr. Youker?

Q (Read by the reporter.)

BY THE WITNESS:

A I do not exactly understand what you are getting at, but if you mean the potential customers that UEC could possibly serve, any utility with a plant in the future that may be near the location of the Fulton County area, naturally UEC would be in a better position to compete for it, if they had the reserves to do so. I do not know if that fully answers what you are driving at.

* * *

[129] Q What advantages does that coal have now, in the light of its transportation cost factor, with regard to existing customers?

[130] A Some specified customers, they would have some advantage because they are on the Illinois River, or near the Illinois River.

Q Do they go down the river as well as up the river?

A Yes.

Q How far down do they go?

A Their present customers?

Q Yes.

A I don't know how far.

Q Is coal purchased on the basis of BTU? We have mentioned that before. Is that on the basis of British thermal units, the heat units?

A That is one of the criteria; BTU, sulphur content, the fluidity of the coal, the moisture and the ash.

Q What does "fluidity" mean, sir?

A Fluidity means the temperature at which the material in the coal will melt and be able to be disposed of.

Certain plants are designed to burn high fluidity coal or low fluidity coal and you cannot substitute one for the other, or you will burn the plant up. Another term for fluidity is [131] fusion of the coal.

* * *

[154] Q Yes.

A Yes, sir.

Q What does "control by location" mean?

A If I understand what you are asking, it means that certain reserves, by the nature of the location of them, control other reserves that are not readily available to someone else, what we call checkerboarding.

Q With that explanation, does Freeman control any reserves by location?

A Yes, they do.

Q Is that in the area of each one of the Freeman mines?

A In the case of Freeman it only applies to one location, and that is the Crown acreage, the so-called Crown acreage.

Q Is that in addition to the mining properties which we have previously discussed?

A I don't follow the question.

Q The previous figure you have given was 236,501,-720 tons, plus 360,000 tons recently acquired.

A Oh, yes. It is in addition to that. There are additional acres that we consider [155] are controlled.

* * *

[160] Q Is there a rule of thumb that coal mining
[161] companies follow in this regard?

A You mean as to the price they would pay?

Q No. As to the amount of money budgeted for that purpose.

A The money budgeted for that purpose?

Q Yes.

A There is no rule of thumb. In the case of United Electric, we have an open bank account, and if we can find reserves that can be mined at a reasonable price, we can go get them. I do not think we would have any trouble.

Q Do you have somebody out looking?

A Oh, yes.

Q Who is out looking?

A We have a geologist who spends his full time, a fellow by the name of Bill Jensen. We have a land man named Tom Latimer, who spends all of his time trying to acquire additional reserves.

We have a Western representative who is looking at all the Western coal reserves, who is trying to find suitable reserves for stripping, that is, find reserves suitable for stripping for a proper customer.

Q What is your Western man's name?

[162] A Tom Tarzy.

Q Is he an executive of the company?

A Yes, he is. He is a vice-president, of the Western operations.

Q Are you spending money at Freeman looking for reserves also?

A When you say "spending money", I do not know what you mean.

Q Well, do you have people out in the field?

A Yes. We are constantly looking for reserves for Freeman also.

Q Who are the gentlemen at Freeman who are out looking for reserves?

A Bill Mullins, who is our chief engineer at the property, and then I look a lot myself, not physically, but I am always searching, to keep tab on any reserves that I hear about that may be available.

Q Have you increased the amount of money allocated for searching for and acquiring reserves at UEC over the past five years?

MR. KEMPF: I think the witness has already testified that they have, I think in his words, an open bank account. I do not know how you [163] can increase that.

BY THE WITNESS:

A Is that the question you asked, if we have spent more money?

MR. EISEN: If you know, yes.

BY THE WITNESS:

A I would say that we are—I do not know how diligently they were searching beyond five years ago, but I know that within the last two years we have made an extraordinary effort to try to find reserves for UEC.

BY MR. EISEN:

Q It is a fact, is it not, Mr. Camicia, that there is coal being mined today that was considered unrecoverable, strip coal, twenty years ago?

A Yes. That is true.

Q Some writers have estimated that Illinois is the leading state in bituminous coal reserves.

A Yes.

Q Have you seen that in coal magazines and so on?

A Yes, I have.

Q Would you say that certain underground coal reserves not thought to be commercially re- [164] coverable today will in fact be commercially recoverable five years from now?

A If you put a limit of five years, I would say no.

Q Ten years?

A Perhaps some underground coal would be minable, simply because the prime reserves have been mined out and you have nothing else, and you must go to it at a higher price.

Q With reference to the Denmark reserves, are they about the last of the prime reserves in Illinois?

A As far as I know, in Illinois, yes, that are uncommitted.

Q Have you tried to buy some of those Denmark reserves?

A Well, I understand that Mr. Nugent recently told me that he had tried to buy the Denmark reserves, and he has handled that himself.

Q What did he tell you?

A He just told me that he tried to buy them, without success.

Q He said that he approached certain individuals?

A Yes.

[165] Q Whom did he approach?

A Ayrshire.

Q Did he name the man?

A I don't recall who it was. He told me he had written a letter.

Q Would it be Norman Kelb?

A No. It would not have been Norman Kelb.

Q I think you said they had about 200,000,000 tons.

A Yes. That was my estimate of their reserves.

Q Is it possible for them to mine out all 200,000,000 tons without constructing new mines?

A Oh, no. They would have to construct a number of new mines. They have no mines in the area.

Q Oh. They don't?

A No. It is a virgin piece of property.

Q Based upon your knowledge and experience, what would you predict ten years from now will be the factors, the feasible factors in so far as depth of coal and thickness of coal, seam ratio and so on, as far as strippable coal reserves?

A There are really two questions there. In so far as the technical ability to remove overburden [166] is concerned, I think that the limit is pretty well established, and that is possibly up to 120 feet, and that is by reason of the spoil banks, the angle of repose of the material that you dump behind you, that would incline to come in to your coal bearing pit.

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[171] BY MR. EISEN:

Q Have you ever talked to Mr. Simon and asked him where he got these figures?

A No, I haven't actually talked to him. I don't have to ask him, because I know. Anybody in the coal business knows that that kind of reserves are not in Illinois or any place else.

Q Is there long wall mining in Illinois?

A There is one installation in Illinois.

Q Where is that located?

A Old Ben 21 mine.

Q Is it possible to use the long wall method at Round Prairie?

A No, absolutely not.

Q Why is that?

A We are going to get back into that pillar mining again, but Round Prairie has several reasons that you could not use long wall.

One is because the limestone comes down right on top of the coal and will not fracture or break behind mining.

Secondly, there is not enough over- [172] burden to cause enough pressure on the coal so that you can properly cut it.

Q It has to be deeper also, then?

A Yes.

Q What is the ratio of—first, could you describe for us what "ratio" means in terms of overburden to depth of seam?

A Ratio is a cubic yard of dirt to a ton of coal.

Q In other words, the cubic yards of overburden to a ton of coal?

A Yes. A rougher way to say that is the number of feet of overburden in relation to the number of feet of coal.

For example, if you had 100 feet of coal—I mean, 100 feet of overburden and 10 feet of coal, you have a ten-to-one ratio.

Q So the two things are about the same? Is that what you are saying?

A Yes, except that the previous definition I gave you is more technical.

Q Which definition do you use in your business, in correspondence and so on?

A We use the footage definition, but [173] in our engineering studies we use the other method.

* * * *

[174] Q When the prime reserves of Denmark are out, then the feasibility of the higher ratio [175] becomes possible, or it becomes feasible, really?

A Up to a point, but you have to realize then that you are getting closer to the costs of underground mining, and your competition there narrows.

Q There are plenty of good underground reserves around, that it?

A Not available, no. There are some underground reserves, some good underground reserves, but everybody has got them. Somebody has got them all.

Q I don't know. It seems to me that if atomic energy poses a possible serious problem to coal companies with all these underground reserves around, or even strip reserves, in spite of the fact that they are all taken up, is it not possible that some of these companies who have these reserves might want to take a short term profit?

MR. KEMPFF: If counsel knows of any availability of any such reserves which he wishes to submit to us for appraisal, we will be happy to do so.

* * * *

[189] Q That coal, as we understand it, is not part of the same geological layer, or something like that.

A It is the same seam of coal.

Q It is the same seam as the Round Prairie seam?

A Yes.

Q Is it the same quality as the Round Prairie coal?

A No, it is not.

Q When do you expect or anticipate that you will use the Round Prairie reserves?

A At the present estimate we do not know when to ever expect it to be profitable to mine that area. It certainly would have to be after the strip coal in that area has been all mined out, and perhaps the coal in southern Illinois.

Q Has UEC ever sought or acquired any reserves on behalf of Freeman?

A No, they have not.

Q You have separate staffs out looking for reserves, one for Freeman and one for UEC?

A Yes. However, on some occasions they [190] work together, where a property may be stripable and deep mine.

* * *

Q Has Freeman undertaken to acquire strip [191] reserves at any time, do you know?

MR. HEDLUND: At any time? I am sorry. Is that what you said?

BY MR. EISEN:

Q At any time within your knowledge.

A Within my knowledge?

Q Yes.

A Yes. To the extent that a property we looked at in West Virginia had some strip acreage or contour mining acreage on it. It was principally a deep mine or underground proposition.

Q If Freeman found strip reserves in Illinois, would Freeman mine it?

A No, they would not. That is sort of a moot question, because Freeman could not find any strip reserves in Illinois because there are not any available.

Q What about the contrary? If UEC found deep reserves, commercially recoverable, would they mine it?

A No, they would not. They are not able to mine it.

* * *

[193] THE WITNESS: Ask the question again, please.

MR. EISEN: Will you read the question, please, Mr. Youker.

Q (Read by the Reporter)

BY THE WITNESS:

A UEC has not found any deep reserves and none have been turned over to Freeman.

BY MR. EISEN:

Q They have not found any other than the ones you have told us about at Round Prairie?

A That they have had for some years, that is correct.

Q Is it your testimony that if they did find some deep reserves, they would turn them over to Freeman?

A If Freeman wanted them and if they were suitable for mining, I think they logically would.

Q What would it cost to put in a mine at Round Prairie?

A For what capacity? For what customer?

Q Well, you can tell us for a million tons [194] first, and then for two million tons.

A For a million ton mine it would cost, for full preparation of the coal and to meet the market, it would cost in the neighborhood of six to seven million dollars.

Q That is the cost including the washing plant?

A Yes.

Q Does that include unit train loading facilities?

A No. You would have to add about a million dollars to that.

Q Did you have in mind using the slope method when you gave us that figure? You characterized it yesterday, I believe, as the slope method rather than the shaft method.

A I said you could use the slope there, and that is possibly what we would decide to use.

Q Would your estimate be lowered somewhat if you were able to use the slope method?

A That method includes the slope method.

Q Does UEC have any mining personnel who have had underground experience?

A No, they do not.

[196] BY MR. EISEN:

Q I believe you testified yesterday that there were no restraints on you financially by General Dynamics, insofar as acquiring reserves is concerned. Was that your testimony?

A Such reserves would have to be satisfactory reserves, minable and merchantable, and capable of making a profit.

Q With that in mind, what have you done, or anyone under your direction, to acquire additional reserves for UEC which would—

A I think I answered that yesterday.

Q I was going to ask you: Have you contacted any other coal companies?

MR. KEMPF: You asked that question and it was answered yesterday also, counsel.

BY THE WITNESS:

A I answered that yesterday.

BY MR. EISEN:

Q I believe you answered it by saying that you have not contacted any coal companies.

A I said that I had not contacted, but our company has contacted the Ayrshire Coal Company concerning the Denmark acreage.

[197] MR. KEMPF: Counsel, you are going over ground that you went over thoroughly yesterday, and I do not think you need to reconstruct the transcript from yesterday. It will speak for itself.

BY MR. EISEN:

Q What was your offer to Ayrshire?

A We asked if they were willing to sell the Denmark acreage. I am not thoroughly familiar with the transaction because I did not handle it.

It was handled by Mr. Nugent, and my understanding is that he asked if they would be willing to lease or sell the Denmark acreage.

Q Did Mr. Nugent tell Ayrshire that he had a blank check?

A Certainly not. He would not tell them that.

Q Well, I mean—

A You don't go to buy something and say, "I'll pay you anything you want for it."

MR. KEMPF: Mr. Eisen, we went through this whole area very thoroughly yesterday, and I think our busy executives [198] of the defendants have more to do than answer questions which you have already asked in your interrogatories, or to answer questions which you have asked during the course of the deposition yesterday. I respectfully suggest that you move on to new ground.

MR. EISEN: I realize that this is a sensitive area for you, counsel, but—

MR. KEMPF: It is not a question of its being a sensitive area.

MR. EISEN: —I have to go into it.

MR. KEMPF: The question is whether you have already asked and had answers to the questions.

MR. EISEN: I think we are taking a lot longer by arguing about it than if I were just to ask him a few more questions. I think all he said yesterday was that he understood Mr. Nugent had written a letter, and I did not go into it any further than that.

[199] MR. HEDLUND: He has testified, Mr. Eisen, that he is not familiar with the transaction, that it was handled by Mr. Nugent. Why don't you just ask him all he knows about it?

BY MR. EISEN:

Q Mr. Canicia, is this all that you have done, to your knowledge, in attempting to acquire additional reserves from other companies?

A When you say "other companies", do you mean just coal companies?

Q Any companies. I do not mean your ordinary day-to-day looking for reserves from landowners, farmers, or individuals. Is this letter all that you know of?

A As far as direct contacts with other coal-producing companies, that is the only one that I know of.

You must understand that we are doing a tremendous amount of work, looking for reserves in the west, in Wyoming and all of that territory, and West Virginia. A lot of this is from railroad companies and from the government, which controls most of the land in the west.

There are no coal companies that you can [200] contact in that area to talk with about reserves, because nobody controls them but the government and the railroads.

* * *

[216] Q Under what length of contract do you supply the large accounts?

A Either five or ten years, usually five years with the opportunity to renew for an additional five years.

Q Does the price specified in the contract remain constant throughout the duration of the contract?

A No, it does not. It has provisions for escalation for wage increases or contract increases and supply increases.

Q Those provide for what, a renegotiations of those terms, or the price? Do they provide for a renegotiation of the price in the event of changed conditions?

A I do not know that you would call it a renegotiation. For example, when we have a new wage contract and the contract with the United Mine Workers provides for perhaps a five per cent increase in wages, then we have the opportunity to go to our customer and say, "Here is the effect of that wage increase on the cost of production at this mine", and we have to prove our point, and we are allowed that increase.

[217] Q What does the contract provide in the event of a disagreement?

A Each of our contracts are written differently, and there are provisions in each of them for any disagreement.

Some of them go to arbitration, to an umpire, and so forth, but usually they are so written that it is pretty clear on these particular points of escalation.

Q Is the arbitration compulsory arbitration?

A In some cases, it is. In one contract that I know of, I think it is the Edison contract, if there is no agree-

ment, then either side has the right to suggest that they go to arbitration, and if the other side does not want to go to arbitration, then he has to make a settlement otherwise.

Q So it is possible that you could lose an account, if you could not get together on the arbitration, or on an agreement as to what the escalated figure ought to be?

A It depends on the contract, again. I guess it could be possible that you would [218] lose an account, but not normally on the escalation clause.

The place that you might lose a contract is on the renegotiation of the contract for price, with respect to which certain contracts have that provision.

Q Has it ever happened that a contract that was to run for five years or ten years was lost to a competitor because you were unable to—or that you gained from a competitor because they were unable—

A None that I know of.

Q —to renegotiate the price?

A None that I know of in our companies.

Q Have you heard of it happening in other companies?

A No. I am not knowledgeable of any.

Q There is just the possibility, then?

A It could happen.

Q You have no knowledge of its having happened?

A No.

. . . .

[5]

EXCERPTS FROM DEPOSITION OF
JOHN M. MORRIS, TAKEN SEPTEMBER 25, 1968
AND OCTOBER 1, 1968
* * *

Q Since your retirement what work have you been called upon to do?

A I was called here last year two or three times in connection with some of the accounts we had been selling and do sell coal to, for advice and counsel. That's about the extent of it so far.

Q When did you retire?

A I resigned on November 1st, 1966, but after November 1st, 1965, I notified them, or at that time I notified them that I wanted to be away considerably, and I did want to retire as of that date, but they asked me to stay on until they were able to put these two companies together, which occurred at about the time I retired, November 1st, 1966, so I haven't been active at all, outside of what I have mentioned, since November 1st, 1966.

Q Could you tell us something about yourself, your experience in the coal industry?

A It has all been in the coal industry. [6] Do you want it from the very beginning?

Q Yes, briefly, sir.

A Well, I got out of high school in 1917 and I took a job for about six months with the Big Four Railroad in Harrisburg, Illinois, as a clerk making out weighbills for coal.

Then I went with the Saline County Coal Company in Harrisburg. That was in about 1919.

Q Is that Harrisburg, Illinois?

A Yes.

Q All right.

A I was there as a clerk and also as a salesman until 1924, when they brought me to Chicago.

I worked for them in Chicago from 1924 to 1928, mostly in sales and some office work. In 1928 that company was bought by the old, then existent Peabody Coal Company, and I was out of a job.

I went to work for the Electric Coal Company, which was purely a sales company, partially owned by United Electric Coal Companies, with an exclusive sales contract to sell all of United [7] Electric's coal.

That company went out of existence, or was dissolved probably in 1931 or 1932, and United Electric moved their general offices to Chicago from Danville, Illinois, and established their own sales organization, and I became a part of that in—it must have been 1931 or 1932, I guess. I cannot give you the exact date.

I continued in that capacity until they made me Sales Manager, I think, but I cannot tell you when. They had a vice-president in charge of sales and I worked directly next to him as his assistant, more what it was.

Then in 1954 he retired. His name was M. M. Soule. In 1954 he retired and I was made vice-president in charge of sales, I think in 1954, when he retired, and also went on the board at that time. He had been on the board.

In 1959 I was made president of United Electric Coal Companies, and retired as I told you.

Q Who was your boss when you were vice-president in charge of sales?

A Well, when I was vice-president in charge of sales, Kolbe was president of the company and [8] I reported to him, Frank Kolbe.

* * *

[14] The two things combined—I can't tell you how much of each—had the effect of increasing the depreciation.

Q What was the new IRS guideline for taking depreciation, if you recall?

MR. HEDLUND: I am going to object to that question. I do not see what materiality that has with respect to any issue in this lawsuit.

MR. EISEN: I will withdraw that question for the time being.

BY MR. EISEN:

Q If in 1964 the 1959 IRS regulations were still in effect, wouldn't the earnings per share of UEC in 1964 be substantially higher?

A Will you ask that question again, please, sir?

MR. EISEN: Will you read the question, Mr. Youker.

Q (Read by the Reporter.)

BY THE WITNESS:

A Yes, they would. The earnings would have been higher. Your taxes would have been higher and your depreciation would have been [15] less and your cash generation would have been less.

I think I said that in this memorandum. I reversed it. If you will look at paragraph 3 on page 1C—do you see that?

* * *

[31] Murray was Treasurer before 1959 and remained. Utterback was made Secretary. I [32] think the same, practically—I do not know of any officer, outside of Kolbe who became chairman of the board and then when he reached seventy he was retired, but all the rest of them were the same after 1959 that they were prior.

I think your annual reports will be a better guide to that than what I can tell you.

Q What advantages, if any, accrued to United Electric by virtue of being part of or associated with General Dynamics?

A The biggest advantage was their tremendous reserve position compared to ours, and with the change in manner and basis of buying coal by these large utilities, we were very vulnerable.

We could not continue our position with them when contracts ran out or when they asked for new bids, and that started to develop very strongly in about 1958 or 1959.

The first indication I had of it, or one of the first, was when Central Illinois Light Company refused to extend their contract, and when other utilities, when they had tenders they were putting out for bids over long term [33] contracts, they just didn't send us any.

Q Where is Central Illinois Light Company?

A Peoria, Illinois.

Q As I understand your testimony, you were refused—

A There is a letter, I think, which was submitted to you from them stating that, in part of the papers you asked for.

Q Was it only because of reserves that they refused to enter into a contract with you?

A Yes.

Q Is that right, sir?

A That is right, yes.

Q How did Freeman enter into this picture?

A They had a big reserve position in Central Illinois, near the Crown mine, which, as Fulton County mined out, would be in a good position with this new unitized train rate idea to supplement and complement and back up any contract that we might make.

.

[54] Q Is it your experience that in order to fulfill a contract such as the example we [55] covered here with regard to the Vipco plant, there is always a little cushion left and when you think you are running out of a seam, there is always a little more coal that you can always milk out of there?

A It can go either way. You can make a big error either way, particularly in a strip mine.

Q How much additional tonnage, if you recall, did you take out of the Mary Moore mine after June of 1960?

A I cannot tell you. The record will show it.

Q Did you supply anybody besides—

A No. A hundred per cent of it went to Vipco.

Q Could you give us the names of all UEC customers who told you that they thought UEC did not have sufficient reserves?

A All I can tell you—I will tell you one I can remember, yes. Union Electric Company.

Q Where are they located?

A St. Louis is their headquarters.

Q You had a conversation or a letter [56] from someone from that company, where they told you—

A I had conversations with them.

Q Approximately when was this?

A Oh, 1963 or 1964; 1963 or 1964.

Q With whom did you have the conversation?

A Mr. Martin Koval, K-o-v-a-l, I believe. He was in charge of coal procurement.

Q Was this in person or over the telephone?

A No; in person.

Q In St. Louis or in Chicago?

A In St. Louis.

Q What was the subject of this conversation?

A Well, they were coming up for some bids for new stations, for a long-term contract, and he said he did not think it was worth while to send us a tender because we could not bid on it anyway under the length of time and tonnage, and so forth.

Q Had you been supplying him prior to [57] that time?

A I have a contract with him now.

Q From which mine?

A From Fidelity.

Q What did you say to him at that time?

A Well, he had a map of all of our reserves and all our acreages that we had to supply him when he made his existing contract, and there wasn't much that I could say to him. He knew it.

I did tell him about our relationship with Freeman and that we might be able to work out a joint arrangement some way so that Fidelity could be supplied until it ran out and Freeman take over beyond, but apparently that was not suitable to him because he didn't send us a tender, as I recall, on that particular bid.

Q You said, however, that you did continue to supply him?

A We are on a contract that will expire in—well, it shows in the record, I don't know, in two or three years, I think. This contract was made about seven or eight years ago.

Q What did he say when you said that [58] Freeman reserves could back up your reserves?

A I don't recall now. I don't recall every part of the conversation. I don't remember what he said.

Q Did you submit a bid on that contract despite his statement?

A We couldn't, under the terms of the bid. I would have to get the bid to refresh my memory, but we couldn't.

For one thing, I remember, that bid required fast loading for unitized train movement, which meant we would have had to put in that type of facility at Fidelity to accommodate it.

Q So that—excuse me.

A That was one thing we did not have.

Q So this was one thing that would have prevented you from taking the contract, regardless of the amount of coal you had left available?

A That was one thing, unless we decided to spend the money necessary to build that sort of a device, which we might have had to consider seriously from the standpoint of our [59] reserve position, as to whether or not we would be justified in spending the money for it.

Q Were there any other customers with whom you had communications or conversations—

A Well, Central Illinois—

Q Excuse me.

A Yes.

Q Let me finish the question.

A I am sorry.

Q (Continuing)—communications or conversations in which they have discouraged you or refused to accept your offer to supply coal because they thought you had insufficient reserves?

A Central Illinois Light at Peoria.

Q Was that the same transaction that we discussed here before?

A Yes.

Q Who did you have the conversation with there?

A Mr. Wellington, Q. W. Wellington.

Q Is that "Q" or "Hugh"?

[60] **A** **Q.** We called him "Duke."

Q What is his name, Quincy?

A I think so. He didn't like it.

MR. EISEN: Off the record.

(There was a discussion off the record after which the taking of the deposition was resumed as follows:)

MR. EISEN: Back on the record.

BY THE WITNESS:

A He is vice-president, and we not only talked about it, but he wrote me a letter which I believe is part of these documents you have.

BY MR. EISEN:

Q You discussed with him, though, the possibility of Freeman backing up UEC?

A Yes.

Q And he went along with you on that?

A No. He hasn't yet. He hasn't yet.

Q I thought that your testimony had been that that was one example of where they had backed you up in supplying coal.

A They had not backed me up. I said I figured that they were a complement to us and [61] that would develop in the years to come, when we did run out of coal, and I was using it as much as I could to preserve our position with the customers we had, as an indication of protecting their coal requirements for the future.

Q From what mine were you supplying—what was the name of this company?

A Central Illinois Light.

Q Central Illinois Light?

A Yes.

Q From what mine were you supplying that company?

A We were supplying it from the Cuba mine.

Q As far as you know, you are still supplying them from the Cuba mine?

A Yes, and will until the mine runs out of coal.

Q How much coal is left at the Cuba mine?

A I don't know as of today. Back in 1965, when I left, I figured that if we were able to get some acreages that we were trying to get right around us, I think at that time I estimated about seven years from then, so it would [62] be maybe four or five years from now.

Q Are there any other customers with whom you have had these conversations?

A Well, I didn't have any conversations with them, but I think our sales people have, and they reported to me that that was a matter of concern.

Q Which sales people and what companies?

A I can't remember now—well, I can remember that Commonwealth Edison is concerned with our reserve position, yes, but I had no conversations with them.

Q Who was the man at Commonwealth Edison, as reported to you by your sales people, who was concerned?

A That would have been whoever was in charge then. They change so much. I think it would have been Glen Beaman.

Q You said "then."

A No. "Glen", Glen Beaman.

Q No. You said whoever was in charge "then." When is your recollection as to when this was?

A I would say three or four years ago.

* * *

[75] Q Where was that located?

A Near Madisonville, Kentucky; east of Madisonville, Kentucky.

Q Yes.

A In their coal ownership or coal leases they had underground coal adjacent to it—I forget the amount, it was not too big—and when they quit mining they left the tipple, the washing plant, the tracks, the buildings and everything else there, because they had no use for them elsewhere, and they were trying to get somebody to come in and mine out this underground coal.

They came to me with it, and to mine it out, you would have to get a place to sell it, and the only place to go with it would be to put in a bid to the TVA, and if successful, put in the necessary equipment to bring the coal to the surface.

They had everything else there they needed, but you would have to put in the slope and put some underground mine machinery in.

I presented it to Nugent to see if they were interested in taking some old equipment they [76] had in some of their mines in Illinois and putting it down there and bringing the coal out and putting it through the plant that was already there, and selling it to the TVA.

If you got a bid from the TVA, it would require quick action. It would require getting in there and starting your mining in a relatively short time.

Most of those bids required delivery to start in probably five or six months, and nobody I could think of would be in a position to do that, who had the know-how and who had the equipment available to move down there and start to work, except Freeman, and being associated with them the way we were, I presented it to them. That's the highlights of the letter.

Q Were there other instances of this character, where you came across coal which you referred to Freeman for their possible interest?

A When we had any underground coal that looked like it had any possibilities, I discussed it with them as to whether or not we should make any move on it, to try and get it.

[77] Usually Frank knew all about the field and knew what the possibilities were, and our prime interest was, of course, to try and find strip coal, but we did run across underground coal in our efforts, and when I did, I always talked to him about it, but I do not think I had any other instance where we made a specific proposition such as that, because this was rather peculiar in the fact that it did not require too much investment and too much in the way of building plant and all that sort of thing.

About all you had to do in that case was get some underground mining equipment, get it down there and put in a slope of 150 feet, which is not too deep, and go to work, and the tonnage was relatively small.

Q Why couldn't UEC mine this coal? Why did you have to turn it over to Freeman?

A We had no underground people who knew anything about underground mining. We had no organization. We had no equipment readily available—I mean, any equipment available at all, and they did. We couldn't undertake it.

[150] (Read by the reporter.)

MR. HEDLUND: That is not a question, is it?

MR. EISEN: Yes—question mark.

MR. HEDLUND: You are asking him if that is a correct statement, Mr. Eisen?

MR. EISEN: Well, yes. That is a leading question, admittedly.

A Well, that was the purpose originally in buying the land, that we thought we had something that could be developed. We paid farm land prices for this coal, we didn't pay what you would normally have to pay for coal lands. And it appeared that sometime this might develop, but we were never able to put together a large enough area that we thought we could strip to justify the money in the form of investment that was necessary. So today I presume the situation remains the same, even maybe worse, with these unitized train rates.

MR. EISEN: Does the stipulation apply to Morris deposition Exhibit No. 22?

MR. HEDLUND: It does.

BY MR. EISEN:

Q Does United Electric still own and operate a dock at Warsaw, Illinois?

A I am not sure. That dock was built by the [151] T. P & W Railroad and I forget the details of the ownership. I believe it belongs to the T, P & W Railroad.

.

[153] A We never got to that point of serious discussion. I may have talked about it, but I have forgotten any specific conversations I had.—but we never got that far.

Q Were you ever turned down by those railroads?

A Never got to that point, no.

Q Who did you talk to at—

A I don't remember now. I know with the T, P & W, I talked to Mr. Russell Coulter, who was president of the T, P & W at that time. With the Burlington, I have forgotten who, if anybody, I talked to.

MR. EISEN: Does counsel know if UEC still owns the Warsaw dock?

MR. HEDLUND: Counsel doesn't know.

BY MR. EISEN:

Q Did any of the Iowa utilities located along the Mississippi ever come down and look over the Industry field?

A Yes. We had some discussions with the Iowa Southern Utilities or the Iowa Southern Utility at Centerville, and the Illinois Iowa Power & Light Company at Davenport.

Q What about Iowa-Illinois Gas Electric?

A Well, that is the one I mean.

[154] Q Is that the same one?

A Yes.

Q Iowa Southern Utilities?

A At Centerville.

Q Those are the two that you have been talking with?

A Those are the two.

Q Did you talk with them about the field?

A No, I didn't. I may have been in on a few conversations, but mostly it was done by our sales department.

Q What was reported to you as to their reaction?

A Nothing favorable. Too little reserve, a relatively high cost production, and no particular interest on the part of either one.

Q I would like to show you a letter, Mr. Morris, from T. H. Utterback, dated November 6, 1963, which is addressed to you. Attached to the letter are two sheets of paper, they are referred to in the letter as sheets which give "the production cost, profit and cash flow estimates" of your Industry field.

MR. EISEN: I am going to ask the reporter to mark the letter Morris Deposition Exhibit No. 23.

(The document was thereupon marked Morris Deposition Exhibit 23, for identification, 10-1-68.)

[171] Q —in 1964 again you seemed to be on the verge of success with that field, when Iowa Southern Utilities was interested. Now, is it [172] really a question of a prospective utility getting interested in it that could change the thing? I mean, couldn't it change tomorrow?

A I have no idea. I couldn't guess on that. The three attempts that you mentioned failed. Now, what the future holds, I have no way of judging.

Q Do you think it was a mistake for United Electric to spend over \$800,000 to develop this field?

A Well, I didn't have anything to do at the start of it. It was there when I became president. And I don't know what motivated them at the time they started it. Up to now, we have been unable to do anything with it. So, if you can call it a mistake—

Q Who did start it?

A I would think maybe Kolbe did when he was the president.

Q Is it your testimony that the Industry field will never be a minable strip mine?

A That is too big a question for me to answer. I couldn't possibly pass an opinion on that. Wouldn't attempt to do so.

Q Well, you were on the verge several times in the past, as far back even as 1961, of thinking that it was almost immediately feasible for mining at [173] the time Commonwealth Edison was interested, were you not?

A I answered that question. I said nothing ever came of it.

Q Yes. But that—wasn't it—

A We tried to sell them, we tried to sell Iowa Southern, we tried to interest Iowa-Illinois Gas—without success. So those three failures indicated that it was a marginal proposition at best.

Q Well, what is your opinion on if and when the Industry field will become minable?

MR. HEDLUND: Mr. Eisen, I think that question has been answered and asked about three times. I think the record will show that the witness is unable to guess when, if ever, the field is going to be minable.

BY MR. EISEN:

Q Would you say it would become feasible to mine that property when the Fulton-Peoria coal becomes dissipated?

A I don't know whether it would or not. I wouldn't pass an opinion on it, because there are so many—so many other fields available to the market. I mean, pro-

ducers able to put coal [174] into different markets by their locations.

* * *

[193] Q Front loaders, the development of machines to load trucks, also have been advanced, haven't they?

A Front loaders?—I don't know just exactly—

Q Isn't there a loader made by—I believe it is Caterpillar, that has advanced strip mining methods?

A That must have been in the last two or three years. We never used one of them, or I never heard about it.

MR. CUSACK: Have you heard of the term "high lift"?

THE WITNESS: High lift. But that isn't used in loading trucks in a strip mine, to my knowledge, unless there has been a development recently.

BY MR. EISEN:

Q Is it fair to say that, based on your opinion, what is considered unrecoverable coal deposits today will be feasible tomorrow to mine, that is, in the future?

A I doubt it. I think we have about reached the point where we are going today as deep as we can go. And unless something develops that I can't foresee, I don't believe that 120 and 150 foot overburden will be mined—successfully.

Q By the strip method?

A By the strip method.

[194] That is an opinion. Keep in mind that I have been out of it for the last two and a half years.

Q Well, forgetting the strip method, would it be your opinion that coal which is considered unrecoverable today because of cost and other reasons would become feasible to mine in the future? And I am directing this question to your experience in the coal business, the historical nature.

A Well, if it couldn't be mined by stripping, then, the only other way would be underground mining. And I couldn't voice an opinion on underground mining, because I never had any experience in it, and I know very little about it.

Q Did you from time to time investigate the possibility of developing underground mining properties for United Electric?

A I did not, no.

Q When you say you did not, did someone under your direction?—what I am talking about, while you were president of United Electric?

A No, we—I believe I told you the other day in previous testimony that when we had something that looked like an underground field, we would call in Mr. Nugent's organization and ask them to decide what [195] could be done with it.

Q Yes, you did mention that. But I am going to direct your attention to the Sangamon County-Petersburg area. Didn't you at one time investigate the possibility of going through an underground mine in that area?

A I don't recall it, sir.

Q I would like to show you a document dated February 24, 1960, addressed to Mr. Tarzy and to yourself from R. J. Hepburn, entitled, "The Davis Property," and ask the reporter to mark that document Morris Deposition Exhibit No. 32.

(The document was thereupon marked Morris Deposition Exhibit No. 32 for identification, 10-1-68.)

A I recall something about this, and I think where he says "however, I would want to check that with people more familiar with it than ourselves," that he was referring to the Freeman people.

Q Weren't you picking that coal up for yourselves?

A No, we were not.

Q You were just going to counsel with the Freeman people?

A We were down there trying to find some strip [196] coal, is my recollection, and this may have come to our attention, and not being underground people, we would ask Freeman to give us their opinion on it.

Q Well, what was your relationship with this Central Illinois Public Service?

A We were one of their suppliers at their Meredosia Plant, and also shipped them some coal to their Grand Tower Plant, and also bought all of our power from them in the Fulton-Peoria district.

Q What do you mean by United Electric not being underground people?

A We have no organization, we have no experience in underground mining. And if we were to attempt to go into it, it would require building an organization that had the knowledge and experience and know-how to do it.

Q Did you ever have any experience in underground mining?

A I drove a mule in a mine once when I was sixteen years old and that was the extent of it.

Q You did have considerable experience, then?

A I got out when they had an explosion, and I have never been back. And that can go in the record.

[197] Q Were any of you UEC's mining engineers—did any of them have that experience, prior experience in underground mining?

A None that I know of, no.

Q Did UEC ever operate an underground mine?

A No. Not to my knowledge.

Q And you came with UEC when?

A In '28.

Q Wasn't there a mine in Kentucky that you had, that was underground?

A We had the Buffalo Creek mine. And when the overburden got too deep, we attempted to put a machine off the bottom, where we had stripped, into the sidewall, and failed miserably. I don't think we had it in there over a few months. We couldn't get anybody to go back in there when the machine broke down.

Q It is your recollection that you only had it in there a few months?

A I couldn't tell you how long. I wasn't—I was in the sales entirely at the time, and I didn't pay too much attention to it. So I don't know how long it was in there. But it failed, I know that.

* * *

[207] BY MR. EISEN:

Q Did you also, Mr. Morris, at one time investigate underground property west of Greenville, Illinois?

A We may have. I don't recall it, off-hand.

Q Do you recall some coal controlled by G. Stuart Jenkins of St. Louis?

A I remember he owned some coal, yes.

MR. EISEN: Let me ask the reporter to identify as Morris Deposition Exhibit No. 35, a letter dated July 17, 1962, addressed to Mr. Morris from R. J. Hepburn, relating to G. Stuart Jenkins, underground coal, west of Greenville, Illinois.

(The document was thereupon marked Morris Deposition Exhibit No. 35 for identification, 10-1-68.)

BY MR. EISEN:

Q I would like to show you this letter, Mr. Morris, and ask you if you can tell us approximately how much coal in terms of tons was involved in that property referred to in the letter?

A Yes, I recall it. It is addressed to me, signed by Mr. Hepburn.

Q Yes, sir, whether you recall how much coal [208] was involved?

A I don't recall, no.

MR. EISEN: Will you stipulate that the stipulation heretofore agreed to with regard to admissibility of documents applies to Morris Deposition Exhibit No. 35?

MR. HEDLUND: Very well.

BY MR. EISEN:

Q I would like to now show you a document, which I will ask the reporter to mark as Morris Deposition Exhibit No. 36, being a letter dated March 14, 1966, from T. H. Latimer to Mr. R. H. Inman, entitled, "Putnam County, Illinois".

(The document was thereupon marked Morris Deposition Exhibit No. 36 for identification, 10-1-68.)

Q The letter indicates that Putnam County is near Greenville—

MR. CUSACK: Granville.

Q Oh, that is Granville.

MR. HEDLUND: That is in Ohio.

A Granville—that is a way down on the Mississippi River, isn't it?

Q Yes. I have to change that.

[209] A Is that where that Jenkins property is?

Q I don't know.

MR. EISEN: Did the prior exhibit—was I misreading that, or did that say, "Greenville"?

MR. SAMUELSON: Greenville.

THE WITNESS: There is two different towns.

BY MR. EISEN:

Q Do you know whether or not we are talking about the same area, Mr. Morris?

A I don't know. Let me look at that letter. Maybe I can tell you.

Q Do you mean United Electric Coal has still another area of underground option that we haven't run into before?

A We looked at anything we ever heard of. And that is on the record.

Q Well, what happened to Mr. Jenkins' property, if you know? Was that referred to Freeman, do you know, sir?

A It must have been, because you see that notation in my handwriting on it.

[210] Q Is that your handwriting that says "bad roof?"

A Yes. So I must have asked Freeman about it.

(There was a discussion off the record after which the taking of the deposition proceeded as follows:)

BY MR. EISEN:

Q I will show you the document and ask you if it doesn't show a lot of coal in that area?

MR. HEDLUND: I will object to your characterization of these documents, Mr. Eisen. I think we will move faster if we let these documents speak for themselves.

Q Were there—well, there is a lot of coal in that area, is there not, Mr. Morris?

A Let me read this letter. I don't know that I ever saw the letter. (Examining document).

Well, you have a question, I believe. I have forgotten what it was, now.

Q I said that there was a lot of coal in that area, was there not?

A That is what this letter says. And the figures are evidently taken from the Illinois Geological Survey Reports, which could or could not be accurate.

[217] Q If, Mr. Morris, after consulting with Freeman, [218] they advised you that a particular underground opportunity that you had come across was feasible for mining, would you have kept it, or would you have turned it over to Freeman?

MR. HEDLUND: I will object to the question as asking for speculation from the witness as to what might have happened had something happened. But if he wants to answer, he may.

A Well, I don't mind answering it. My thinking was that we were not underground people, didn't know anything about it. First, we would get their opinion. As to whether we should even go ahead and try to acquire this underground acreage, whether or not it would be put into United Electric, I never pursued that question. I just wanted to know what it looked like, what he thought we ought to do about it, if it was worthwhile pursuing, having in mind all the time, that if and when it was to be mined, they would do it, and not us. Now, whether the title to the coal would be taken in our name or theirs, I never got to that point, because I never found any that was worthwhile. So that would be speculation for me to say what we would have done with it.

Q If Freeman were not associated with United Electric, would your thinking have been the same?

* * *

[226] Q Did Mr. Nugent have someone prepare a cost estimate with relation to trying underground mining at Fidelity?

A One time when we reached a point real close to the City of Du Quoin and were having some blasting problems, the citizens were up in arms because we were shaking their tea cups, and we had about three or four hundred thousand tons of coal that it looked like we were going to have to give up and not strip, we hated to go away and leave that coal. I believe Nugent sent a couple of his engineers over there to make an estimate on how we could go in underground off the pit with some of his underground machinery and mine that coal out. And I believe he gave us an estimate. I have forgotten

now, but I believe he gave us a cost estimate on what it might cost to do that. And my recollection is that it was so high, that we abandoned the idea.

Q Was that the estimate prepared by J. N. Matheson?

A I would have to look at it to tell you.

* * *

[234] And adjacent to that property Ruby Chandler Jordan had a lease on about six million tons of No. 9 [235] seam coal, which would have to be mined underground. It was too deep for stripping. And the life of the Ruby Mine was getting rather close to the end—I forget when they mined out—and at that time some consideration was given by Freeman of taking some of their equipment that they weren't using, like underground mining machines, and putting it over there and mining that coal.

Q I think we are duplicating what you have already told us.

A I think we are.

MR. EISEN: Does the stipulation apply to Morris Deposition Exhibit No. 46?

MR. HEDLUND: It does.

BY MR. EISEN:

Q I would like to show you a letter dated November 20, 1957, to Mr. G. I. Grasty of Richmond, Virginia, from T. H. Latimer, the subject is "Coal Lands in West Virginia and Kentucky", and ask the Reporter to mark that Morris Deposition Exhibit No. 47.

* * *

[236] Q Now, you have investigated other coal lands, though, haven't you, underground possibilities in states, during your term as president?

A Primarily, we looked for strip coal, [237] and sometimes we would run across underground in connection with our strip investigations.

Q Have you looked for strip coal in these eastern and middle eastern states, like Kentucky and Virginia, West Virginia?

A No, we didn't get into that area. It was clear out of our bailiwick. There were a lot of big producing companies down there already formidably established in

the market and in the coal fields. And sometimes we would have somebody write us or come into see us, and if they did, we would take a look at it to see if it was worthwhile. Plus the fact that in the early days of the TVA, when they began to develop rapidly and their coal use increased sharply, we spent a good deal of time down in Tennessee and Kentucky trying to find strippable coal. On that I couldn't give you the years, but that was back in the late 50's.

Q You mentioned that you had an arrangement with U. S. Steel to mine some of their coal in the Danville area?

A It was an acreage rather small in the Merrimore property.

.

[241] Q When do you think it will be feasible to mine the Round Prairie field?

A That is purely a guess. Purely a guess.

Q Do you have an educated opinion?

A I couldn't give you any time or how many years it will be. I can only say that the competitive situation will have to change to where mining that coal would be profitable.

Q During your tenure as president you increased, did you not, the holdings in the Round Prairie field?

A I think we did. How much, I don't know.

Q I would like to show you a document entitled "Round Prairie field", dated January 16, 1963, which appears to be a letter, a two-page letter, addressed to you from Mr. T. H. Latimer, and ask the Reporter to mark that document Morris Deposition Exhibit No. 48.

(The document was thereupon marked Morris Deposition Exhibit 48 for identification, 10-1-68.)

.

[244] Subsequent events indicated that it is going to be a long time, if ever—I wouldn't say "if ever", because maybe someday that field will be mined, but it will have to come after the competitive situation from Belleville strip, southern Illinois raw coal, on volume and unitized train rates have gotten all the business they want or can handle. Then it might be possible to consider this. But when, I couldn't give you any idea.

Q But apparently you felt optimistic about it at this time to pick up the other half?

A Well, I don't know what we picked up. I presume if those figures show it, why, we did. But as of today or as of the time I left the company, there wasn't any indication that it was going to be mined anyway soon.

MR. EISEN: Does the stipulation apply to Morris Deposition Exhibit No. 48?

MR. HEDLUND: It does.

[270] As of the time you left, had Alcoa furnished you with any prediction as to when [271] they would be making use of this coal?

A They had not, to me.

Q They didn't indicate to you that they would be using that in the 1970's sometime?

A No, they did not.

Q Did they indicate to you that you would be in a position to mine it for them?

A They said they would consider us. They never gave us any definite commitment, no.

Q Do you feel that you would have an advantage over any other company in mining this coal field?

A You mean United Electric as such, or United Electric Freeman?

Q United Electric.

A United Electric would have a disadvantage of going in there and trying to mine it, because they would consider experienced underground operators instead of us by ourselves. I don't think they would give us any consideration on mining it as United Electric.

[275] BY MR. EISEN:

Q Did you ever have a conversation with Mr. Nugent where you discussed the right of first refusal in the event that Alcoa decided not to make use of the Beaucoup acreage?—That is, United Electric.

A I don't think that we had a first refusal. I think all we had was that they would consider, if they decided that they didn't want the Beaucoup field, they would certainly give us every consideration, I believe

is the way they put it, and that was about as far as it went. And I am quite sure I told that to Mr. Nugent.

Q And likewise, they would give you every consideration in the event that they decided to develop it?

A Yes.

Q —As far as your being the company which would mine it?

A We would be allowed to discuss it [276] with them, and they would probably, knowing them and any big corporation, discuss it with a lot of other people, too.

[298] Q Do they use any in the winter time?

A It depends on the type of contract they have with the gas company, whereby on [299] cold days when the gas is needed for home heating, they could cut them off. And I don't know now whether utilities had that type of contract or not. Some industries I do know had contracts where they would get gas when it was available in the wintertime, and then when it got cold and the gas was needed for home heating at the much higher price, why, they could cut them off in I guess an hour's notice, I don't know. Percentagewise, I couldn't tell you what it was. But it was substantial, I would say.

Q But not in the wintertime was it substantial?

A Not in the wintertime, no.

Q Do you know what organization or agency would keep records upon which you would rely in determining what such percentages were?

A For the utilities, the Federal Power Commission Records would show it. For other industries, I don't know where you would get those records.

Q Does United Electric and Freeman serve generally the same geographic market area?

[300] A Not entirely, no. Some areas we serve, both of us. Other areas they serve and we do not, and some areas we serve and they do not.

Q What are, in general, the geographic areas which you both serve?

A The Commonwealth Edison plants in the Chicago area are served by both of us. One plant of Union Electric is served by us, another plant is served by them. And I don't think there is much else.

Q What about Central Illinois Public Service generating stations?

A We serve them at Meredosia, and Freeman, too. At Grand Tower Freeman ships them, or did—I don't know what they do now—what would be termed a by-product in the form of dust or carbon. And we sell them our straight screenings, which is a part of our normal production. And that is the extent of our business with the Central Illinois Public Service.

Q Is there competition between Freeman and United Electric?

MR. HEDLUND: I am going to object to that question. That is an ultimate issue [301] to be decided by the Court.

MR. CUSACK: Off the record.

(There was a discussion off the record, after which the taking of the deposition proceeded as follows:)

THE WITNESS: May I answer the question?

MR. HEDLUND: You may.

A I would say that there is no competition at the Grand Tower plant where we both ship, because Freeman is shipping one type of product and we are shipping another. At least, that was the case when I retired.

Q Well, in your experience did you solicit many of the same customers that Freeman solicited?

A Yes. Yes.

Q In bidding on new business where Freeman and UEC had both been soliciting the same customers, in bidding on new business from such customers was it the practice for UEC and Freeman to get together after the association of the two companies, affiliation of the two [302] companies, to determine which mine of both companies would yield the maximum profit in submitting such bid?

MR. HEDLUND: May I have that question read back, please?—You have finished, have you?

MR. EISEN: Yes.

Q (Read by the Reporter.)

MR. HEDLUND: I submit nobody can understand that question. Will you try to rephrase it, Mr. Eisen?

MR. EISEN: Well, if the witness understands it, I would like him to answer.

Q Do you understand the question?

A Not entirely, no.

Q In bidding on new business would Freeman and UEC officers determine which United Electric Coal or Freeman mine would yield the maximum profits, and in the bid designate that mine as the source of supply?

MR. HEDLUND: I still don't understand the question, but if the witness does, he may answer.

A It is a rather involved question and [303] would require some clarification. It would depend on where the customer was, the type of equipment he had, and his requirements for coal and the type of coal he had to have, and the transportation involved, and the competitive situation with other coal producers. A lot of factors would have to be analyzed, and you would almost have to take each specific situation separately to determine what you would do about it.

Q Well, was there any business prior to the merger—

MR. HEDLUND: I object to the question so far. There has been no merger.

Q Prior to your association with Freeman—

MR. HEDLUND: Do you want to give us a date, Mr. Eisen? I think we will move faster if you can pinpoint the period of time that you were talking about.

Q Prior to 1960, were there customers whose business both United Electric and Freeman solicited, whose business was not so solicited after 1960?

A I don't recall of any.

[304] Q What are the outer limits of United Electric Coal's sales area for any of its mines?

A You would have to take each mine separately.

Q You would have to?

A If you want an answer, you would have to.

MR. CUSACK: Off the record.

(There was a discussion off the record, after which the taking of the deposition proceeded as follows:)

BY MR. EISEN:

Q Is there more or less competition in the coal industry today than there was ten years ago?

A There is fewer companies, of necessity, due to the changed market conditions. But my opinion at the time I left, the competition between those companies was still just as great. You had a different type of market entirely.

Q Have any companies gone out of business in the last ten years?

A Do you mean failed or gone bankrupt?

[307] MR. HEDLUND: Do I understand that the only purpose that you would want to recall Mr. Morris would be in the event that we have difficulty or are unable to reach agreement [308] on the standing stipulation with respect to these documents?

MR. EISEN: Yes.

MR. HEDLUND: Fine. Are you finished now?

MR. EISEN: Yes. The only thing I was going to say, that we should do that, you know, while we are in St. Petersburg and have Mr. Morris available. That is all.

MR. HEDLUND: Fine. You have concluded now?

MR. EISEN: Yes, I have.

MR. HEDLUND: I have just a few questions.

CROSS-EXAMINATION

BY MR. HEDLUND:

Q Mr. Morris, with the benefit of hindsight and the knowledge that has been gained through the years from studies made of the Industry field, if you were president of United Electric today and the Industry field were brought to you for the first time, would you make a decision to acquire that [309] acreage?

MR. EISEN: I am going to object to that question as highly speculative, calling for a speculative opinion and conclusion on the part of the witness.

Q You may answer, Mr. Morris.

A I would first want to know if the coal was salable and at what price, and do a lot more investigating into the minability of that area. In view of what I know up to now about it, I seriously doubt that I would acquire the field.

Q Mr. Morris, you have testified with respect to the underground coal at the Fidelity mine. Do you know whether that underground coal was acquired simultaneously with strip coal in the same package?

A The part I know of positively was the underground coal that we acquired from the Union Collieries, along with some strip coal that they had.

Q In order to get the strip coal, do you know whether you had to take the underground [310] coal as well?

A That is correct.

Q Mr. Morris, do you know whether, with respect to the Round Prairie field, that field is sufficiently filled in at this time so that underground mining could as a feasible matter be undertaken?

A Do you mean—

MR. EISEN: Answer yes or no. Otherwise, I am going to object.

A You asked me if I knew or—repeat the question, please.

MR. HEDLUND: Would you repeat the question?

Q (Read by the Reporter.)

A I don't know.

Q Mr. Morris, I believe you testified that filling out the Round Prairie field might be helpful in strengthening United Electric's position with Alcoa. Do you recall so testifying?

A I said it might be helpful, yes.

[311] Q Mr. Morris, finally, you testified, I believe, that substantial amounts of gas are used in the market served by United Electric [312] in the summer, but that the amount of gas used by United Electric customers in the winter is not substantial. In that light, I ask you whether it is possible, in your experience, to run a profitable coal mine by producing only during the winter months?

A No.

MR. EISEN: I am going to object to that. It calls for a speculative answer.

MR. HEDLUND: I have no further questions.

REDIRECT EXAMINATION

BY MR. EISEN:

Q When United Electric Coal's Fulton and Peoria mines are exhausted, could the sales which are now satisfied from these mines be supplied from the Industry field?

A In my opinion, no.

Q Why not?

A I don't believe that we could achieve a cost factor that would permit it, and the extent of the field, to what

knowledge we have of it at the moment, would not attract large utilities. And the best evidence of that was the attempts we made to interest three utilities, [313] which I testified to earlier, notably the Iowa-Illinois Gas & Electric, the Iowa Southern Utilities, and the Commonwealth Edison.

Q If the reserves generally in the Fulton-Peoria area become depleted, not just United Electric's but other companies', wouldn't the Industry field then become a feasible supplier for the customers which are now supplied from that area?

A I do not think it would.

Q Where would they have to go?

A They would go to Crown, they would go to Denmark, they would go to Captain, they would go to Truax-Traer's mine in Hillsboro, and they would go to Southern Illinois.

Q Would it include the Peoria Utilities, themselves?

A It would.

Q Do you mean the underground mine of Truax-Traer at Hillsboro is more efficient than would be a strip mine operation of UEC at Industry?

A I would not know about their cost factor, except in a general way. But it would be my opinion that it would, with the type of [314] unitized train rate they could get to the destination.

Q Would an underground mine at Round Prairie be more commercially feasible than would a strip mine at Industry?

A It might be under certain conditions.

Q What conditions?

A Extremely favorable operating conditions, and the type of transportation that unitized trains would make possible for them. But—if I may continue?

Q Certainly.

A —You would have Southern Illinois ahead of you. And you would have all of the strip coal available at Captain and Denmark. They would have to be satisfied first, before Round Prairie would be of any value.

MR. EISEN: I have no further questions.

(Whereupon, at 6:18 P.M. the deposition of John M. Morris was concluded.)

[8]

EXCERPTS FROM DEPOSITION OF FRANK FRED-
ERICK KOLBE, TAKEN OCTOBER 10, 11, 15, 17,
18, 22, 24, 25, 28, 29, 30, & 31, 1968

.

Q And did you then become active in the [9] man-
agement of United Electric as an officer?

A Like Joe before me, I did not like the then man-
agement. However, the company was practically in re-
ceivership, and the bank determined the chief operating
officer. So, I worked with the bank, and I might say
against them, because we had some acrimonious times.
Finally, they were willing to substitute Louis Ware.

Q Is that W-a-r-e?

A Yes.

Q As president of United Electric?

A As president of United Electric. Ware was a min-
ing engineer and had spent several years at one of the
nitrate companies in Chile.

Q And then did you succeed Mr. Ware as president?

A Then later on, Ware resigned to become president
of the International Minerals, and then I became Presi-
dent.

Q In what year did you become president of United
Electric?

A 1939.

Q And you continued on the Board?

A Yes.

[10] Q And how long did you continue as president of
United Electric, Mr. Kolbe?

A Until 1959.

Q And after that, what was your position with Unit-
ed Electric, if anything?

A Oh, I was Chairman of the Board for two or three
years.

Q And do you recall when you resigned as Chairman
of the Board?

A I think in '62. It will all appear in the minutes.

Q Mr. Kolbe, could you give us a little background
on United Electric, when it was founded, if you know?

A It was formed in 1919 as a consolidation of several properties down in Danville, Illinois, and was not—well, it had its troubles, as did all the strip companies at that time. The machinery simply wasn't there yet, and it had various troubles.

. . . .

[23] Q Can you give us some of the names you do remember?

Did you promote Mr. Morris?

A No. Our sales department was a very fine sales department. We have always had an outstanding sales department. Soule—

Q That's S-o-u-l-e?

A S-o-u-l-e, yes, and Morris, and Tarzy. I always thought they were much superior to anybody else. They were not coal peddlers in the sense that you go from one retail merchant to another, like a milk man, and pick up an order, but they were real sales vice presidents.

Would you like an illustration?

Q Well, yes, that would be fine.

A Well, for instance, Johnny Morris, we wanted to sell coal to Northern States Power and Light—

Q That's in Minneapolis?

A Minneapolis. We figured out that we could make them a price shipping it by barge up there that would be better for them than bringing [24] it up the Lakes.

. . . .

[31] Q Mr. Kolbe, I now show you what has been marked as Kolbe Deposition Exhibit 2, for identification, and I ask you, Mr. Kolbe, if you can [32] identify this document?

A Yes.

Q And what is it, Mr. Kolbe?

A It is the United Electric Coal Companies' 1956 Annual Report.

Q Mr. Kolbe, I ask you to examine that document, and I ask if you are familiar with it?

A Yes.

Q And have you had an opportunity to examine it in recent days?

A Yes.

Q Mr. Kolbe, is the document which has been marked as Kolbe Deposition Exhibit 2 accurate?

A Yes.

MR. CUSACK: I ask counsel if the standing stipulation applies to Kolbe Deposition Exhibit 2.

MR. HEDLUND: It does.

MR. CUSACK: Thank you.

THE WITNESS: I brought Clovis on the Board, too, and Ames.

MR. HEDLUND: I object to that as not responsive.

* * * *

[59] A Yes.—We earned that, those figures.

One year here, as a matter of fact, in '64, we earned \$5.16, and that's before this 72 [60] cents, which would have made it \$5.88, and, as a matter of fact, the 72 cents may be low, for all I know.

Q I see.

A So we way exceeded these figures.

Q As set forth on 9-C?

A Yes, yes. I might say it was really a tragedy for our stockholders that this merger with Crown—with Truax didn't go through. We would have gotten—well, today, on the basis that I mentioned, of 1.45 shares of Truax for ours, we would have gotten—our stock today would have been worth a hundred dollars. It was a tragedy that it didn't go through.

MR. HEDLUND: I move to strike that testimony as not being responsive.

BY MR. CUSACK:

Q Mr. Kolbe, I would like to go through some of the annual reports of United Electric with you for a moment and ask if you can comment thereon.

* * * *

[74] Q Of old shovels?

A Yes. The bottom half of a shovel costs about as much as the top. So, this is a very substantial saving in capital costs.

Q Could you describe, Mr. Kolbe, for us—excuse me, please. Strike that.

Are there any other advantages, Mr. Kolbe?

A Yes. You can carry a wider pit, too, with a wheel, which has its advantages, because you are running trucks down through there all the time, and you have a wider pit to run those shovels.

Another advantage is that your first spoil bank is a shovel spoil bank and not too high. Then your wheel spoil is put way back, with the result that you don't have this soft material coming down into the pit.

You see, a lot of this dirt and so forth can run almost like water.

Q Is that a serious problem in strip mining, that the spoil bank flows into the pit?

A Oh, yes. We had a lot of that trouble at Buckheart and even in low overburden there.

You see, this coal was originally the bottom of a lake, and then various layers of sedi- [75] ment were deposited on top of it, and some of that sediment can be filled with vegetable matter, and it just can rot, and also, if you have sand, you see, wet sand, it will run almost like water.

. . . .

[78]

No. 67 C 1632

UNITED STATES OF AMERICA, PLAINTIFF

vs.

GENERAL DYNAMICS CORPORATION, THE UNITED ELECTRIC
COAL COMPANIES, AND FREEMAN COAL MINING CORPO-
RATION, DEFENDANT

Friday, October 11, 1968,
10:00 o'clock a.m.

Parties met pursuant to adjournment.

PRESENT:

MR. EISEN,
MR. CUSACK,
MR. FUTTERMAN,
MR. SIMS,
appeared for plaintiff;

MR. HEDLUND,
MR. KEMPF,
appeared for defendants.

ALSO PRESENT:

MR. FRANK NUGENT,
MR. J. MICHAEL McGUINN.

(The taking of the deposition of FRANK FRED-
ERICK KOLBE was resumed in Room 2634, 219
South Dearborn Street, Chicago, Illinois, as follows:)

* * * *

[83] Q Are you a member of any other trade associa-
tions or an officer of any other trade associations?

A I was a director and a vice-president—I can't remember if I was also Secretary—of the Chicago Association of—what the heck is the name of that?

Q Of Commerce and Industry?

A Of Commerce and Industry, yes. When I ceased being a director, I was made a member of the Senior Council.

Q Were you a member, Mr. Kolbe, of the Midwest—

A I can still go to all their directors' meetings, but I can't vote. I can talk, but I can't vote.

Q Were you also a member of the Midwest Coal Producers Institute, Mr. Kolbe?

A Yes.

Q Were you a member of the Illinois Coal Producers Association?

A Yes, I was.

Q Mr. Kolbe, yesterday you testified in regard to the development of unimite.

[84] A Yes.

Q Who discovered unimite?

A I did. I got a patent not on it specifically, but on a method of packaging and so forth.

Q On a process?

A Well, it was a container. The duPont Company—I turned it over to the corporation and the duPont Company paid the corporation \$20,000 for the patent.

Q Thank you.

Now, before, Mr. Kolbe, we return to your testimony regarding the Kolbe Wheel Excavator, could you please tell us who were the competitors of United Electric during the time that you were a director and an officer of United Electric?

A Well, everyone who sold coal to the same people we did was a competitor, and a number of people who didn't.

Q Can you give us the names of these companies, sir?

A Well, I would start out with Truax-Traer. Harrison Eiteljorg had a little mine out there that I have forgotten the name of.

[85] Then, of course, there was Peabody and also Freeman, and there were just any number of them.

Q Was Ayrshire a competitor of United Electric?

A Oh, yes.

Q Was Stonefort a competitor of United Electric?

A I think so. Yes, they had a mine in Fulton County. They would be competitors of ours, yes.

Q Thank you.

A You could get that better, probably, from Mr. Morris, who actually was fighting with all of these people all the time.

* * *

[96] Q Do you consider, Mr. Kolbe, the wheel a very important development for the success of United Electric, that is, contributing to the success of United Electric?

A Oh, enormously. How in the dickens would we have mined a hundred feet of overburden without it in Cuba, or 85 feet, and made money? Cuba has been a very, very successful mine.

Q With high overburden?

A With high overburden, and the Buckheart mine, the overburden there would just swish out on you, and we were able to put it back so that it obviated that.

Q Mr. Kolbe, do you have an opinion on the capabilities of a wheel excavator regarding the moving of overburden, do you have an opinion as to what is the most overburden a wheel excavator is capable of moving?

A In Germany they move up to 300 feet. I don't know.

Q Of overburden?

A Of overburden. They handle it differently than we do. They finally have to load it into railroad cars and transport it away, but it digs [97] up to 350 feet.

* * *

[118] BY MR. CUSACK:

Q Mr. Kolbe, do you know whether other mining companies had looked at the Banner mine property prior to United Electric acquiring this property?

A Yes.

Q Do you know which companies looked at it?

A Ayrshire, Truax, Sherwood.

Q Is that Sam Sherwood?

A Yes.

Q Did United Electric obtain the Banner mine property after Ayrshire, Truax and Sherwood had looked at it?

A Yes. The options originally, I think, were owned by maybe Swallow—I have forgotten his first name—down in Danville, and he peddled them around.

Q Do you know whether Ayrshire turned down the Banner mine property as a new mining property?

A They all three turned it down.

Q All three turned it down before United Electric acquired this property?

A That is right, that is right.

• • • • •

[125] Q You testified, Mr. Kolbe, regarding the Cuba mine, the Buckheart mine, the Fidelity mine, the Buffalo Creek mine, the Rushville mine and— [126] what was the name of that mine near St. Louis?

A Freeburg.

Q —and the Freeburg mine.

A Yes.

Q Did United Electric operate any other mines while you were chief executive officer of United Electric?

A Yes. We opened up the Mary Moore mine near Danville and the Skyline mine near Charleston, West Virginia.

Q Mr. Kolbe, did United Electric ever operate an underground mine?

A Oh, we had a small operation at Buffalo Creek.

Q A small underground operation?

A Yes.

Q Could you explain how United Electric got into the underground mining business at Buffalo Creek?

A We had two advantages. In the first place, we had a washing plant that was built for the strip mine, so we would have no additional cost of constructing a washing plant or preparation plant.

Q Was that a strip mine at Buffalo Creek?

[127] A Right.

Q All right.

A Next, we would not have to put down a shaft because we could go right in from the last cut of the strip operation.

We also had a man down there, whose family had owned and he had operated a deep mine up in Fulton County, a small operation.

Q An underground mine?

A An underground mine. With all of those factors, we thought we could do something down there.

Q How long was this underground mine at Buffalo Creek in operation by United Electric, do you recall?

A I can't tell you any more. I don't remember.

Q Mr. Kolbe, one of the contentions of the defendants in this lawsuit, and Mr. Hedlund will correct me if I am wrong—

MR. HEDLUND: I may object already, but continue.

BY MR. CUSACK:

Q (Continuing) —is that United Electric [128] does not have the capability of engaging in underground mining. Do you believe this is a fact, sir?

A First of all, I am not sure that the underground mining companies do.

Q Do you believe, Mr. Kolbe, that United Electric has the capability of opening an underground mine if it so desires?

A Oh, yes. We could do it, yes, but I would just like to say that this is a very difficult job.

The underground mining companies in 1923 turned out eighty-one million tons of coal. Thirty years later, in Illinois, they turned out a little over twenty.

In other words, there was sixty million tons production of companies that went out of business because of fires, roof falls and bankruptcies. It is a tough business, it is a tough business, and we would have to be very—any organization would have to be very, very careful going into the underground mining business.

Q Do you believe, Mr. Kolbe, that United Electric would be able to go into the underground mining business and be able to go into it success- [129] fully, under your management?

A Yes, but it is a big job. It is a big job. It depends on a lot of things.

[130] Q Do you believe, Mr. Kolbe, that United Electric at the present time, with proper management, could go into the underground mining business?

A Well, sure, with proper management. It also would depend on picking up, of course, the proper reserves, on an increase in the price of coal, and how do you know where nuclear power—is nuclear power going to provide a ceiling on this coal?

This underground business is a tough business; it is a tough business.

MR. CUSACK: Mr. Youker, will you please mark this document as Kolbe Deposition Exhibit 12 for identification, being a letter dated February 27, 1957, to Mr. W. D. Hillery.

(The document was thereupon marked Kolbe Deposition Exhibit 12 for identification, 10-11-68.)

* * *

[133] BY MR. CUSACK:

Q Mr. Kolbe, would you please examine Kolbe Deposition Exhibit 13 for identification.

A Yes.

Q Can you tell us whether United Electric, during the period of time when you were a chief executive officer, often did look at underground properties with a view to the possibility of mining these properties?

A Well, we looked at them but we never did anything much about them. During—

Q Mr. Kolbe, is it your—

MR. HEDLUND: Perhaps, Mr. Cusack, you should let Mr. Kolbe finish his answer.

BY MR. CUSACK:

Q Do you have anything more to say in answer to that question, Mr. Kolbe?

A During these years we had two problems that would prevent us from going into something completely new like this.

One was our financial situation. We always needed more equipment and we needed money for various things. To have gone into something [134] completely new would have absorbed that money. We didn't have it.

Now, in the '60's when the corporation began to throw off substantial amounts, the situation would be different, but in the '50's, no.

Secondly, I felt the deep coal business would need a considerable degree of creativity. For instance, and I just took these figures down from the Crown mine, in 1967 they turned out 3,066,000 tons from this report here (indicating).

Q You are referring to the 1967 Annual Coal, Oil and Gas Report of the Department of Mines and Minerals of the State of Illinois?

A Right.

Q All right.

A They had 577 men. That is 5,000 tons a man, roughly. We would get two or three times that output per man.

Q That is, the United Electric mines?

A Yes. So you can judge that these labor costs in these deep mines is too much.

As a matter of fact, years before I had looked into the matter of this—oh, this long [135] wall mining in Germany, John Huey who was in Germany, I asked him to investigate it—

Q How do you spell that, sir?

A H-u-e-y.

Q Yes.

A It is a plow method, and it was subsequently used in this country, but I mean, these deep mines, as I say, would involve a measure of creativity on my part that I was not able at that time, I felt, to deliver, and I did not care to go into a business which I felt needed so much creativity as that deep coal would.

When you get into one of these things, you do not know in the beginning what you might run into. I could give you a number of illustrations of people who got into things that they did not know about underground.

A friend of mine, Mesham, down in Kentucky had three fine mines—has three mines.

I said, "How did you get these mines?" He said that the big companies that developed them just couldn't make any money out of them, so he took them over.

Maybe he runs them non-union, I don't [137] know, on a lower wage scale or something, I don't know how he runs them, but anyway, they were all failures from the standpoint of the big companies.

* * *

[158] Q Could you tell us about it, please, sir?

A Well, we acquired a great deal of the coal up there, up to 100 feet.

This land, of course, is expensive land. I do not know the top price that we paid on it, but I remember one piece that we got into a bidding contest with the farmer adjoining it, and this farmer wanted to pay \$700 an acre for that land, just for farm land. It was very good farm land.

We stopped, though, at about a hundred feet, as I remember it, and didn't go above that.

You see, your strip coal differs from deep coal in that you have to buy the surface and it is hard to really make a good return on that surface land.

You have got a lot of money tied up for a long time. If we paid, for instance, \$700 an acre, and we would have to pay more than the farmers because we would have to out bid them, that would be eleven or twelve cents a ton, in fact it would be more than that, because your coal is not solid in the field oftentimes. You might have to buy a 200 acre farm and get only 50 acres of coal on it, or something like that.

[159] You pay ten cents a ton now and in ten years, at seven per cent, it would be twenty cents, and in twenty years it would be forty cents, and in thirty years it would be eighty cents. Your compound interest really eats you up.

Q Mr. Kolbe, do you know whether or not, or do you believe that there are strip coal reserves in the Canton area between 100 to 170 feet of cover which could conceivably be strip mined?

MR. HEDLUND: You mean as a practical matter, Mr. Cusack?

MR. CUSACK: Yes.

MR. HEDLUND: I mean, as a physical practical matter. I am objecting to the question. I do not think it is properly phrased. It cannot be understood.

BY MR. CUSACK:

Q Do you understand the question, Mr. Kolbe?

A Yes.

Q Would you please answer it, sir.

A You would have to look at this question, I think, from my whole experience in the coal business.

You see, when I got into it in 1939, [160] really, in the Cuba mine, I do not think anybody would have bought that Cuba Field that we went into. Ware did not want to have anything to do with it. It was next door to Truax and Truax didn't buy it.

80 feet of overburden was just too much overburden, and similarly 100 feet later on would have been. I stopped at 100, you see there, in 1957, but now I just don't quite know what I could do.

It is a matter of creativity. It is also a matter of what the deep mines can do.

I believe, for instance, that certain of these deep mines are losing money. If they are losing money, the price of coal has got to go up and that has something to do with my opinion on it.

Furthermore, Truax-Traer has a limited life there in Fulton County, we have a limited life at Banner and at Cuba and Buckheart, and it might well be practical to mine much deeper overburden than we had originally thought.

There is also the advance in explosives and the advance in drills, and every year these [161] machines get bigger and better, the wheels get bigger and better—or get better, and the deep mines, I would want to know what they could do.

. . . .

[164] A They were all those for which I could get published reports—I would like to change that. Any reports. Not only published, but any. These are all published reports, from published reports.

Q Thank you, sir.

Mr. Kolbe, do you know the present name of the West Kentucky Coal Company?

A That may still be their name. They were taken over by Island Creek, but whether they dissolved the original company or not, I don't know.

Q Is West Kentucky Coal Company a subsidiary of Island Creek Coal?

A It is now.

Q Mr. Kolbe, are the above coal producers, that is, the ones you have listed in Kolbe Deposition Exhibit 16-C as Ayrshire, Old Ben, Peabody, United Electric, Truax-Traer, West Kentucky and Zeigler, are those companies in competition?

A Yes. Yes, I think so. Generally, yes.

MR. HEDLUND: I am sorry. I did not hear your answer.

[165] BY THE WITNESS:

A Yes.

BY MR. CUSACK:

Q Based on your knowledge and experience, Mr. Kolbe, is Freeman also a competitor of these above firms?

A Yes.

Q Can you give us generally, Mr. Kolbe, why these firms are in competition, your reasons for it?

A They are in the same territory and at least some of their coals can be used for comparable purposes.

Old Ben, however, would have some coal that we could not compete with, metallurgical coal and so forth.

Q Mr. Kolbe, I would like to show you what has been marked as Camicia Deposition Exhibit No. 1, which is entitled, "Keystone's Map of the Coal Fields of the United States," published by the Keystone Coal

Buyers' Manual, and I ask you, sir, to please examine this exhibit.

A Yes.

[168] Q Do you know whether any of that coal comes in there now?

A Peabody had some mines, but I cannot remember whether the mines have worked out or not.

Q Thank you, Mr. Kolbe.

Are there trade associations whose membership is limited to coal producers?

A Oh, yes. National Coal, National Coal Policy, Midwest Coal Producers.

Q Mr. Kolbe, are there any labor unions whose memberships are limited to employees of coal producers?

A United Mine Workers, and Progressive Mine Workers, I think is still in existence.

Q Mr. Kolbe, do you know if there are any commercial publications which only cover the coal industry?

A There are a great number of them, yes.

Q Could you name a few for us, please?

A Coal Age, and Seward's, which is limited, I think, to export coal.

Q Is that S-a-w-a-r-d's?

A Yes.

[169] Q All right.

A There is also Black Diamond. There are a number of them.

Q Mr. Kolbe, based on your knowledge and experience, what fuel, if any, dominates the steam electric utility market in Illinois and surrounding states?

A Well, coal.

Q Can you give us the reason for this, sir, if you know?

A The low cost.

Q Mr. Kolbe, on a year-around basis, have coal prices been considerably lower, considerably higher, or about the same as firm gas prices for electrical generation?

A Oh, they are lower, much lower.

Q What would your answer to that be in regard to firm oil prices?

A Well, oil used to sell for \$2.00 a barrel in the east, I have forgotten what it sold for out here, and it takes four barrels or more to make a ton of coal, to give you the same heat value, so that is \$8.00 a ton.

We sold coal to our—to the utilities [170] at a delivered price maybe of \$5.00.

Oil was way out. I don't know of any utility that burned oil out here in this district as a regular proposition. They might burn it during a strike or something, but it was way out of our—

Q What about natural gas?

A Well, natural gas was sold only as an excess proposition. I mean, in the summer the natural gas would be dumped here.

They would sell it to the customer in the winter at \$1.00 for a thousand cubic feet. They would sell it to—our price on coal might be 25 cents for the same amount of heat value, so they would reduce their prices down to that, so of course there is no sense in selling a commodity that is worth a dollar actually for 25 cents, so they just did it because they had the pipelines and didn't have to charge anything for that, or the overheads, and furthermore, they very often had contracts with the land owners that required that they keep this gas flowing out of the wells.

* * *

[189] MR. HEDLUND: I am sorry. Who was receptive, Mr. Kolbe, to that idea?

BY THE WITNESS:

A The Ayrshire Collieries.

BY MR. CUSACK:

Q Continue, please, Mr. Kolbe.

A But the Aluminum Corporation wanted even more than that, so therefore we informed them about these large reserves of underground coal to the north of us.

Q That is the Beaucoup field?

A The Beaucoup Field. We said we did not care to tie up money that would not be—for coal fields that

might never be mined, and certainly would not be mined for a long time in the future, but they said they would. Their position, of course, was different.

So we agreed to acquire coal fields up there for them that we would mine at some future date. We had no contract to mine it, but we would establish, as we have in many other things, a reputation for knowing our business and so forth, and if it seemed advisable to us at the time, we would mine it for them.

* * *

[199] Q Mr. Kolbe, can you tell us when United [200] Electric started to acquire coal reserves at the Round Prairie Field?

A I would have to look at the record on that. I just don't remember those details.

Q Mr. Kolbe, Kolbe Deposition Exhibits 32-A, 32-B and 32-C refer to what coal field, sir?

A It is a coal field north of the Fidelity mine, separated from it by the Beaucoup Creek Field north of there.

Q Do you know the name of the field, sir?

A Round Prairie.

Q Thank you, Mr. Kolbe.

Are the coal reserves that United Electric acquired—excuse me. Strike that, please.

Mr. Kolbe, do you know whether United Electric acquired coal reserves at the Round Prairie Field?

A I just don't remember all that. I just don't.

MR. CUSACK: Will counsel stipulate that United Electric acquired coal reserves at the Round Prairie Field?

* * *

[203] Q Mr. Kolbe, who was the president and chief executive officer of United Electric at the time United Electric began to acquire underground reserves at Round Prairie?

A I think Morris was. Wasn't he president? I think so. Not me.

Q Mr. Kolbe, why did United Electric, if you know, acquire underground reserves at Round Prairie?

A Well, just for the reason given there, that we have confidence in the coal business and would want to continue our life beyond the life of the strip coal reserves.

Q And these were underground reserves, sir?

A These were underground reserves.

Q Who was it contemplated, Mr. Kolbe, if you know, would mine these reserves?

A We would.

Q United Electric?

A Yes.

* * * *

[207] Q Assuming you could not buy any more strip reserves, what would you do if you were running United Electric?

A I would look into the deep coal. I must say that I would be a little hesitant. I would be very, very careful about it, because I don't believe, for instance, that Freeman makes any substantial amount of money.

I think they are probably good operators. If people like that can't make money, why do you rush into a business like that?

Old Ben, which I think is a very well-run company, last year earned 35 cents a ton before taxes. That's no sort of profit to make.

Q Mr. Kolbe, do you believe—

A I would have had ideas, as a matter of fact, on different ways of deep coal mining, just like I did in strip coal mining. I might have revolutionized the whole thing.

Q As you did with the Wheel Excavator and with Unimate on stripping?

A Yes, yes, drills and one thing and another.

[208] Q All right.

A I also was instrumental in getting the deep coal field into metallurgical coal. I mean, all of these things.

Q Mr. Kolbe, do you feel that United Electric could mine the Round Prairie Field?

MR. HEDLUND: That has been asked and answered, hasn't it, Counsel?

MR. CUSACK: Yes, I assume it has. Thank you.

BY MR. CUSACK:

Q Mr. Kolbe, have you ever heard of the Industry Field?

A Yes.

Q Can you tell us generally where it is located?

A It is located west and south of the Buckheart Mine.

Q Is that in McDonough and Schuyler Counties?

A Yes.

.

[230] Q Thank you.

Now, Mr. Kolbe, based on your experience, when United Electric would open up a strip mine, as the mine was mined through the years, would the mine have more reserves than originally was estimated, or less reserves than was originally estimated?

A I don't recall any mine that we ever had that wouldn't have more, because in the first place, with the development of machinery and methods over the years, you could mine stuff that you didn't know you could mine in the beginning.

Also, you would start out with certain reserves. There would be land around it which you wouldn't know, of course, whether it had coal in it or not, but as it developed, it would have.

You wouldn't drill at the beginning, because you wouldn't want to put the money into it. For instance, when Buckheart was started, Ware had nine million tons, 600,000 tons, a 600,000 ton mine per year, which would be fifteen years. He didn't know that he had—he didn't [231] definitely know that there was any more coal around there, but actually that mine now has been mining 30 years, and got 600,000 tons a year, which would be eighteen million tons or twice the original reserves, but I think they mined a million and a half or two million tons per year, so I mean, it is way in excess of what he thought he had at the beginning—or what he knew he had at the beginning, and you wouldn't drill all of this surrounding land, because if you drilled it, the farmer would know that he had coal and he would

go to another coal company and say, "Look: There's coal here, with so much overburden. I will sell it to you."

Well, what are you going to do? You are going to buy it. Your hand is forced, and you don't want that to happen.

So I don't know of any mine that did not have more reserves than were originally figured on.

Q Thank you, Mr. Kolbe.

Now, Mr. Kolbe, do you feel that the management of United Electric was dilatory on not acquiring more strip coal reserves?

[232] A After I left?

Q No. While you were there, sir.

A No. We were not dilatory, because we had other uses for—we had—when you have—put it this way: We always had to regulate our purchases by our pocketbook.

This company was in receivership in the 1930's, practically, Ayrshire was in receivership and other mines were practically in receivership.

The coal business was also a roller-coaster business. When the diesel locomotive came in and the householder went to oil and gas, we lost about half our business. We were on a rollercoaster, and a lot of people got thrown off at those turns. You had to watch your financial position as well as what you would like to have done. Now, after I got out, I think they have been very dilatory.

* * * *

[237] BY THE WITNESS:

A Well, I can make the comparison out of my mind.
MR. HEDLUND: Just so the record is clear.

BY MR. CUSACK:

Q Do you want to have the question read, Mr. Kolbe?

A They have \$8,000,000 of cash and no bank debt. We always usually had a great deal of bank debt. This is a wholly different situation.

What I wanted to do—for instance, we evolved a way of transferring heat, and I tried to get a patent on it, although we couldn't get it, but I might say that the

method now is used by the German outfit—three or four companies, in fact, who are building an atomic energy plant, and I understand they are using our method of heat transfer of that, although I had no idea of getting into atomic energy, but it is a way of transferring heat that I think works very well, works better than this method they use—that General Electric and the other people use.

[238] The Hanna Coal Company—the Hanna Company want to put in an oil recovery process from shale, and they are still trying to get government permits that would use this process to get the oil out of the shale.

The Sun Oil Company have made a big investment in the tar sands of Athabaska. They are not using our process for separating the oil from the sand, or the tar from the sand, but the Hanna Company would use our process.

Now, I would have liked to have investigated the possibility of using our process on those tar sands. If we had been in a cash position so we could have done these things, so we would have had enough cash to follow up on them, we would have done some of them.

Furthermore, the A. O. Smith Company back in the early 1930's went into gold mining out in Nevada, where the gold occurs in very, very small pieces, you can only see it under a microscope.

They were going to mine this deposit, open pit mining. We are experts on open pit mining.

[239] Q United Electric?

A United Electric.

Q Yes.

A I would have looked into that. I notice now there is a mine in Nevada doing this, and doing very well, apparently. It was described in the May issue of National Geographic.

I mean, with a company with money and with expertise, the world is the limit.

Q What about coal reserves, Mr. Kolbe?

A We would have acquired those coal reserves north of Canton, the coal reserves over here in Vermillion County, had they still been available, and also those in—

we would have drilled much more extensively out in—

Q Industry?

A Industry, sure. The world, the sky is the limit.

MR. CUSACK: Thank you very much, Mr. Kolbe. We have no further questions at this time. There is a possibility, however, that we might have one or two more questions tomorrow.

• • • •

[242]

No. 67 C 1632.

UNITED STATES OF AMERICA, PLAINTIFF,

vs.

GENERAL DYNAMICS CORPORATION, THE UNITED ELECTRIC COAL COMPANIES, AND FREEMAN COAL MINING CORPORATION, DEFENDANTS.

Thursday, October 17, 1968,
10:00 o'clock a.m.

Parties met pursuant to adjournment.

PRESENT:

MR. EISEN,
MR. CUSACK,
MR. FUTTERMAN,
MR. SIMS,
appeared for plaintiff;

MR. HEDLUND,
MR. KEMPF,
appeared for defendants.

ALSO PRESENT:

MR. FRANK NUGENT,
MR. J. MICHAEL McGUINN.

(The taking of the deposition of FRANK FREDERICK KOLBE was resumed in Room 2634, 219 South Dearborn Street, Chicago, Illinois, as follows:)

.

[298] Q At this luncheon, Mr. Kolbe, do you recall telling Mr. Chaffetz and me that while you had been president of United Electric you had been very reluctant to undertake underground mining?

A That is my position, and I might well have told you that.

Q Do you recall telling us, in connection with that, that during the 1950's you had been too old to undertake such a new venture?

A No, no. Let's see. How old was I in the 1950's? I was between 60 and 70.

I would be hesitant about it, because George Harrington tried it and couldn't finish it.

Q Who was George Harrington?

A He was president of the Chicago, Wilmington & Franklin, and got himself into a mess, partly through age, and Freeman Coal Company picked up his properties.

Q Thank you.

A At a low price.

.

[300] Q We will get to that. I would like to have you—

A Because any one year would not be so decisive as you might think it was.

Q I understand that. I again pose the question, sir:

Do you recall, obviously without access to the records at the moment, whether between 1945 and 1950 United Electric materially improved its reserve position?

A No. I would not know the exact years in which we did it, and you really should have an understanding of the strip coal reserves.

Q Yes, sir.

A Which you will bring out later, you say.

Q Yes, sir.

A O. K.

Q Do you recall, getting back to the luncheon with Mr. Chaffetz and myself, telling us that United Electric's failure to materially improve its reserve position between 1945 and 1950 was because of the following factors: First, that United Electric had 30 years of [301] reserves at that time; secondly, that it was in a poor cash position; and third, that it had been your judgment at that time that UEC could not afford the substantial investment that would have been involved in view of the

fact that the investment could not be recovered until a long period of time had passed?

That is a long question, Mr. Kolbe. Would you like the reporter to read it?

A No.

Q My question is, do you recall saying that to Mr. Chaffetz and me at that luncheon?

[302] A Yes. I think I would have said that, because that is my position.

Q Thank you, sir.

A I should—

Q Well, sir—

MR. CUSACK: Just a moment, please. I do not think he has finished the answer to the question—

THE WITNESS: These things are not complete.

MR. CUSACK: —and I think he should be given the opportunity to finish his answer.

MR. HEDLUND: He has answered the question. The question asked for a yes or no answer, and he said yes.

MR. CUSACK: Mr. Kolbe—

MR. HEDLUND: If he has a further explanation, Mr. Cusack, this is your witness and you can bring it out on direct.

MR. EISEN: I think the witness should be permitted to answer the question fully.

MR. HEDLUND: It is not the function—

. . . .

[303] MR. HEDLUND: No. I am sorry, Mr. Cusack. This is my deposition and I intend [304] to conduct it the way I wish to and according to the rules.

MR. EISEN: In that case, we are going to move that the question and answer be stricken.

MR. HEDLUND: Fine.

MR. EISEN: The witness not having had an opportunity to complete his answer.

MR. HEDLUND: I am certain Mr. Cusack will give him ample opportunity to complete his answer on that particular question on redirect.

BY MR. HEDLUND:

Q Again at this luncheon, Mr. Kolbe, do you recall telling Mr. Chaffetz and me that in your opinion nuclear energy poses a severe threat to the coal industry—

A Yes.

Q —and that—I am sorry?

A Again, that is my position, that it does.

Q Very well.

. . . .

[305] Q Do you recall discussing this subject with Mr. Chaffetz and me?

[306] A I would agree with that statement, but not with the "no one", and I think it should be further—for instance, if you had a lot of machinery and you were at the end of the life of a particular mine, you would open a new mine with that machinery.

Now, whether you would—in general, I do not think you would put ten or twenty million dollars into a property if you did not have a long term contract in general.

Now, if you already had the equipment, if it did not cost you much to move over there, if you had an unusually favorable cost figure so that you knew you could get the business in the future, take it away from somebody else, all of those things bear on the matter. You state the position too narrowly.

MR. HEDLUND: Thank you, sir.

BY THE WITNESS:

A Which is my objection to previous questions.

. . . .

[316] Q What was the purpose of this letter?

[317] A We were talking about a possible merger between ourselves and Truax. The Crown interests controlled a third or more of our stock, and I think a merger would require a two-thirds vote maybe, so they had to be consulted, and were really the key figures,

you might say, or 'would be a key figure in it, and I didn't want them to have—I wanted them to have a true idea of the relative value of these properties.

Q By "them", you meant the Crown interests?

A The Crown interests, that is right.

Q At this time was Mr. Henry Crown or any of the Crown interests directly involved in your negotiations with Truax?

A (No answer.)

Q By "directly involved", I mean present at meetings with Truax people or conducting conversations with them.

A I would not know that, because they might well talk with the Truax people and not have me there.

Q The negotiations were going on at this time, though, is that correct? This is October, 1956.

* * *

[320] Q Why did you think that this was not a [321] particularly good place to have reserves?

A I think the coal there sold for a little less than it did in Fulton County, and there is a very bad competitive situation.

The deep mines had better coal—they were located in that same area and they had better coal. There was a lot of rock in that area and so forth.

Q Is it your recollection that there were deep mines at that time over near St. Louis?

A I think Lumaghi Mine was over there, but in any case, I had more reference to the—I would think more of the mines that are a little east of the Fidelity Mine.

Q Over in—

A Waltonville, and one thing and another, Orient, Old Ben, and so forth.

Q In the third paragraph of Kolbe Deposition Exhibit 9-A, the first sentence states:

"More of the benefits would come from the Truax properties than from our own."

* * *

[337] **FRANK FREDERICK KOLBE,**

called as a witness by the plaintiff herein, having been previously duly sworn, was further examined upon oral interrogatories and he did thereupon depose and testify further as follows:

CROSS EXAMINATION

(continued:)

BY MR. HEDLUND:

Q Mr. Kolbe, when you and I met, I believe it was last week or the week before that, do you recall telling me that you had nothing to do with the sales of United Electric during the 1950's?

A Very little.

MR. HEDLUND: Would you hand the witness Kolbe Deposition Exhibit 9-A, 9-B and 9-C, please, Mr. Cusack?

(There was a short interruption, after which the taking of the deposition was resumed, as follows:)

MR. CUSACK: I have handed him the exhibit, Mr. Hedlund.

.

[357] **Q** This page states in part:

"For the present fiscal year ending July 31, 1957, it is estimated that United Electric's earnings will be as follows: . . ."

Then at the bottom of the page, following a number of figures and entries, there is the item, "Net income per share on 677,920 shares", and after that legend the figure of \$3.62.

In the light of that, Mr. Kolbe, does that refresh your recollection as to when you believed, in writing the letter to Mr. Crown, that United Electric was going to earn \$3.50 to \$4.00 a share?

A Yes. It would appear that they would earn it for the fiscal year ended July 31, 1957.

Q In point of fact, Mr. Kolbe, the company earned \$3.02 a share that year, is that not correct?

A \$3.02, yes.

Q Would you please turn to the next page, that is, the second page 2 of Kolbe Deposition Exhibit A.

[358] A Yes.

Q It is stated in this document, at the bottom:

"At the end of the present fiscal year United Electric's working capital could be over \$5,000,000
..."

A Yes.

Q At the end of that fiscal year, Mr. Kolbe, what was United Electric's working capital?

A \$3,438,544.

Q It is a fact, is it not, Mr. Kolbe, that United Electric did not achieve working capital in the amount of \$5,000,000 until 1964?

A I would not know.

MR. HEDLUND: Would counsel please hand Mr. Kolbe the 1965 annual report of The United Electric Coal Companies to refresh Mr. Kolbe's recollection.

MR. CUSACK: Yes.

. . . .

[367] Q With whom were you negotiating at that time?

A There were some brokers down in Indianapolis, either at that time or later, and I think there were other people who had done the same thing. I think that a chap by the name of Brooke was also involved. He had done the same sort of thing for the Little Sister Mine.

Q Were the brokers in Indianapolis acting as principals or as agents for others?

A No. They were acting as agents.

Q Did you know for which principals they were agents?

A They mentioned Mr. Eitelgeorge. I am not sure that would refer specifically to this time, to this deal.

Brooke operated through the Continental Bank, I believe.

Q This deal never went through, did it, Mr. Kolbe?

A No. In addition to the—do you want to know the further advantages of this deal?

[371] Q In point of fact, Mr. Kolbe, it is true, is it not, that without regard to the Banner Mine, United Electric did not produce 4,500,000 tons a year until the year 1964?

A I have already pointed out that we may have diverted some of the Cuba and Buckheart coal to Banner, and that is really—that in making my statement, I had in mind that Cuba and Buckheart would keep all their business and not be diverted.

Q Of course, you said that you do not know whether or not it was. If it was not so diverted, it is true, is it not, that without regard to Banner, United Electric did not produce 4,500,000 tons a year until the year 1964?

MR. CUSACK: I object, Counsel, to the speculative question.

MR. HEDLUND: You may answer, Mr. Kolbe.

MR. CUSACK: Do you understand it, Mr. Kolbe?

BY THE WITNESS:

A Yes. I do not think it gives a very [372] —the picture, though. I don't think so.

[374] Q Could you tell me something of the circumstances under which Mr. Lamm left the company?

A We had drilled a property over in Ohio which Arnold thought highly of and—

Q I am sorry. Was that the Sunny Hill Coal Mine?

A That was the Sunny Hill, yes. I was not as enthusiastic about it as he was, but also we had to buy new equipment at Fidelity and we had lots of need for funds at our present mines, so I did not believe that we should become involved further over there at that time.

So he left the company and formed a company with several other people, and they went ahead and mined it.

Also, it was an opportunity, and if they were successful they would have—if they were successful, they would

possibly make a great deal of money, and they possibly might not.

Q I gather that Mr. Lamm disagreed with you as to the wisdom of acquiring this property.

A He did.

[375] Q Did he also disagree with you as to the policy of the company at that time toward reserves, other than the Sunny Hill Mine specifically?

A I should here distinguish between two sections of reserves. We never disagreed on building up reserves on our then mines, and I might say that we have never lost any significant reserves at those mines.

I mean, everything that could be mined through the washing plant at those mines has either been mined or was acquired. We never disagreed on that.

Arnold, however, was much—he was more expansion-minded than I was.

Q Is it fair to say, and I am asking you if it is fair to say, that one of the principal reasons Mr. Lamm left was a disagreement between you and him as to United Electric's reserve policy in general at that time?

A On the opening of new mines it might have been. I do not know that. I know that he saw this opportunity and took it.

. . . .

[400] MR. CUSACK: That is at Page 5 of the 1952 annual report.

THE WITNESS: Yes.

MR. CUSACK: The preceding sentence to the paragraph Mr. Kolbe just read.

BY MR. HEDLUND:

Q I would like to now show you, Mr. Kolbe, a copy of the 1954 annual report and direct your attention to Page 6, the second paragraph, and see if that refreshes your recollection as to when that operation was discontinued.

(There was a short interruption, after which the taking of the deposition was resumed, as follows:)

BY THE WITNESS:

A Yes. It was discontinued before the date of this report, before September 10th, 1954.

BY MR. HEDLUND:

Q Why was it discontinued, Mr. Kolbe, if you recall?

A Because we did not make any money there.

Q It is the fact, is it not, Mr. Kolbe, that you had substantial losses in that operation—

[401] A Yes.

Q —for that period of time?

A Yes, we did.

Q Who was in charge of that operation?

A The Mine Manager, Mr. Bob Donaldson. I think we also got someone else under whose management it was specifically.

I am not sure that Donaldson was not in charge of it when it was put in and we got this other man later. I would not be sure of that.

You see, I think Reid was the Operating Vice President at that time. Let me just see.

(There was a short interruption, after which the taking of the deposition was resumed, as follows:)

BY THE WITNESS:

A May I see the previous one, the 1953 one, or the 1952 one?

MR. HEDLUND: Certainly.

(There was a short interruption, after which the taking of the deposition was resumed, as follows:)

[402] BY THE WITNESS:

A Yes. In 1953, Mr. Reid was vice president. It would be under him.

BY MR. HEDLUND:

Q Had Mr. Reid any prior experience in underground mining?

MR. CUSACK: If you know, Mr. Kolbe.

BY THE WITNESS:

A I would not know. I do not remember.

BY MR. HEDLUND:

Q It is a fact, then, is it not, Mr. Koble, that although the 1952 report, as you read into the record, states that, "When this operation", referring to the drift operation, "When this operation is fully developed, it will substantially increase the output of this high premium coal for which there is an excellent demand", in point of fact that never happened?

A We were wrong on it, which I might recall to you is a common happening in the deep coal industry.

Q Why was that, Mr. Kolbe, a failure as an operation?

A I am not sure. I am not sure.

* * *

[408] Q Thank you.

Do you recall, Mr. Kolbe, whether that predicted tonnage was ever in fact achieved?

A I do not believe it was.

Q Would you tell me the circumstances under which United Electric got involved in the operations of the Skyline Mine?

A The realization of this coal was very high, as I remember, between \$5 and \$6, and of course, our coal sold for much less than that, so between the realization and the engineering reports, we thought we could make some money down there.

Q Did Island Creek Coal Company come to you with this proposition or did you go to them, if you recall?

A I think I heard about it through Bill Cooke, and we probably went to them first.

Q Is it fair to say, then, that you initiated the negotiations that led to this [409] operation?

A I would say we did.

Q I am speaking of "you" in a personal sense.

A Oh. Yes.

Q If you recall.

A Well, Bill Cooke spoke to me about it, and I took it up, of course, with our Operating and Sales organizations, and we went on from there.

Q Island Creek at that time was mining in the immediate vicinity, were they not?

A Yes.

Q Was there something unusual about the mining conditions with respect to the Skyline Mine?

A This was one of the few strip mines, possibly the only one in that vicinity, so it would have, we hoped—we thought—cost advantages.

Q Was Island Creek not stripping any coal—

A No.

* * * *

[420] (The document was thereupon marked Kolbe Deposition Exhibit B for identification, 10-18-68.)

BY MR. HEDLUND:

Q I now hand you, Mr. Kolbe, what has been marked Kolbe Deposition Exhibit B for identification, and ask you if that refreshes your recollection as to another attempt by United Electric to get into underground operation.

(There was a short interruption, after which the taking of the deposition was resumed, as follows:)

BY THE WITNESS:

A This says, "In connection with your memorandum of October 8th", which I do not have here. It says:

"I am sorry that the underground miner did not perform. I believe this method of mining has a great future, but underground mining is not our business, and under the conditions I think the only thing for us to do is to continue to [421] wait until someone in the deep mining field produces a working machine and a workable system."

MR. CUSACK: For the purpose of the record, the memorandum is to Mr. R. J. Hepburn, dated October 9, 1957.

BY MR. HEDLUND:

Q Does that refresh your recollection as to an attempt, in addition to the drift mine at Buffalo Creek by United Electric, to get into underground mining?

A Well, this would be exactly contrary to it, wouldn't it?

"I think the only thing for us to do is to continue to wait until somebody in the deep mining field produces a working machine and a workable system."

Q Do you recall purchasing the underground miner referred to there?

A Yes. It was for use at Buffalo Creek.

Q Did you participate in the design of the machine?

A No. What happened was that I saw the possibilities of such a machine and the C. W. [422] Neff Company, George Harrington, had worked for, I think, years on the Kinley, McKinley or Kinley machine, and he had had a man by the name of Robbins working on that with them.

At the same time Arnold Lamm was working on the Colmol. There were a lot of people working on this general idea, and I saw where it would make quite a difference in the deep coal field.

None of these machines were too good at that time. I went over and saw the Sunny Hill operation. I was in hopes that we could use it.

We had, I hoped, an advantage in operating an underground mine in that we could go in from our open pit. We would also have a washing plant. It would increase the reserves we could put through that plant, possibly on second shift and so forth.

The strip coal industry has done a lot of work along this line. Peabody built a punch miner utilizing part of this and so forth, and I believe they lost a substantial amount of money on it, but anyway, they did it. It is a [423] logical thing for a strip coal miner to be interested in.

I went over and saw Arnold's machine, went underground, with the possible idea of making a small one. Arnold had that in mind. It didn't strike me.

Then we thought of making a machine similar to the Kinley machine. The Kinley machine I think has been very successful—it has been successful, put it that way, a lot of them have been made, so we engaged this same man, Robbins, with the idea of using this machine at Buffalo Creek.

It never worked out. I cannot tell you just why, but it did not work out. I had nothing to do with the design of it.

Q Did anyone at United Electric have anything to do with the design of this machine?

A Well, it was really under Robbins, whose job it was to produce the small Kinley machine, and we may have drawn up parts for it, our Engineering Department.

Q Was it your idea to get a smaller version of this machine?

[424] A Of the Kinley?

Q Yes.

A I think it probably was. It probably was.

Q Did the machine, to your knowledge, ever mine any coal at Buffalo Creek?

A If it did, it mined not very much.

Q What subsequently became of the machine?

A I imagine it was simply junked.

Q Would it be fair to say that this venture cost the company in excess of \$600,000?

A No. I don't think—you mean the whole deep underground mine?

Q I mean the whole business with this machine about which you have been testifying.

A No. I do not think the machine cost that much.

Q That was not really my question. I did not ask you how much the machine cost. I asked whether—

A That is, though, what you did ask.

Q If I did, then, I would like to rephrase the question.

In terms of the initial cost of the [425] machine and any other expenses involved in its use, repair, redesign or design, do you recall whether or not the total expense to the company was in excess of \$600,000?

A Just on that one machine?

Q Yes.

A I don't remember, but I wouldn't think so.

.

[448] BY THE WITNESS:

A (Continuing) I just want to say that—after '63, of course, I haven't kept track of developments in the coal business too much—that a new way of shipping coal has come in, which is the unit train, and this new development, of course, could affect this Rail-to-Water. I don't know whether it has or not, but what might have been a good investment in good judgment by these seven coal companies at that time could be changed, of course, by later developments. I don't know whether it has been or not.

The rate on these—on this shuttle service that has been inaugurated is substantially less than the previous rate; in some cases, perhaps half as much.

BY MR. HEDLUND:

Q Mr. Kolbe, do you have Kolbe Deposition Exhibit 13 in front of you, and if so, would you review that once again?

(There was a short interruption, after which the taking of the deposition was resumed, as follows:)

[449] BY THE WITNESS:

A Yes.

BY MR. HEDLUND:

Q In the margin, in handwriting, appears the following, under the date of 2-25-57:

"Kolbe says not interested."

Do you recall why you were not interested in this field, if that, in fact, was the case?

A It's a deep mine, in four feet of coal, away from our present operations, and we may have already started thinking about the Banner property, we had other uses for our money. I think there would be a lot of reasons against it.

Q Is it fair to say, Mr. Kolbe, that because this involved underground coal that that was the principal reason why you were not interested?

MR. CUSACK: I think, Counsel, that the witness has answered the question.

BY THE WITNESS:

A It was certainly one factor, one [450] factor and a big factor.

Q This coal was indeed—

A (Continuing) Had it been strip coal, in other words, I think that might have overruled—that would have overruled a lot of other objections.

Q This field was a few miles from your holdings at that time in Oklahoma, was it not, and in that connection I direct your attention to the second paragraph of Kolbe Exhibit 13.

A Yes.

MR. HEDLUND: Counsel, do you have the first volume of the transcript?

MR. CUSACK: Yes.

MR. HEDLUND: If you would provide Mr. Kolbe with that, and I am interested in Page 58.

* * *

[456] At Fidelity similarly the two operations adjoin each other. Truax were going to put in a big washing plant—well, perhaps they had put it in, but in any case, we were mining up not too far from that washing plant. Perhaps [457] at times we could have used that washing plant instead of hauled coal way down to ours.

Those would be some of the things. Furthermore, in our selling and executive expenses, our sales personnel called on the same people as their sales personnel. There is an obvious economy there.

BY MR. HEDLUND:

Q Was there at that time, if you know, a substantial tonnage of both companies going to the same destinations?

A Yes, there was.

Q If you know, at that time—

A (Continuing) That's why, as a matter of fact, we set up a joint barge company, because we both barged coal to the northern—to Northern States Power Company.

Q Is it a fact, if you know, Mr. Kolbe, that at that time Truax was much more of a competitor of United Electric than Freeman was?

A I would think it was. I would think it was. I might say it definitely was.

.

[474] A The front end of my excavator, I suppose, could be—would do what a German one would, could be developed that way.

The rear end, that is to say, the one part that dumped the material back, would have [475] to be extended. That extension would be—might have to be—would have to be, I would say, a series of separate, independent conveyors; 300 feet, that would be—well, it would be quite a conveyor system back there. It would require modifications. The success of those modifications would, of course, depend on your thickness of coal. If you were uncovering a lot of coal, and if that were cheaper than a deep mine, you might do it. Otherwise, you wouldn't do it. It would require engineering modifications which might be very severe modifications.

BY MR. HEDLUND:

Q It is true, is it not, Mr. Kolbe, that strip mining as it is practiced in Germany is radically different than it is in this country?

A They have to move overburden, they have to move it and then they have to move the coal. And, of course, everything is different. I mean—I don't mean—I mean everything in the world, each mine is different. The fact that there were interchangeable things is shown by the fact that Krupp would come over here and utilize their machines here. Sure, it is [476] different.

.

[516] Q —whether or not it was?

A No.

Q You are familiar, are you not, with the fact that in 1962 Truax merged with Consolidation Coal Company?

A Right.

Q Do you have an opinion as to whether that merger, at the time, awarded Truax stockholders more value or less value than would have occurred had you merged with Truax at the 1.45 to one ratio?

MR. CUSACK: We object, Counsel, as calling for a purely speculative answer by the witness.

BY THE WITNESS:

A Well, I have no idea—

MR. CUSACK: It is very far afield.

BY THE WITNESS:

A I don't know things like that.

BY MR. HEDLUND:

Q You have no opinion?

A No. I have no opinion.

Q Very well.

A The whole thing was useless from then [517] on from my standpoint. Why should I have an opinion?

Q Mr. Kolbe, while you were chief executive officer of United Electric, did you make any attempt to acquire or merge with any other coal company?

A I spoke to Sam Sherwood at one time about acquiring part of his properties.

Q Was he at that time president of Sherwood-Templeton Coal Company?

A Yes.

Q When was this that you spoke with him?

A I don't remember. I never got any place. He said, "I wouldn't have a job if I sold out to you", so that ended it.

Q This was before, was it, Sherwood-Templeton was acquired by Peabody?

A Oh, yes.

MR. CUSACK: Counsel, you are misstating the facts. Sherwood-Templeton Coal Company was not acquired by Peabody Coal Company.

The Stonefort Coal Mining company, Inc., the operators of the Will Scarlet and [518] Allendale Mines, were acquired by Peabody Coal Company in 1966. Mr. Sherwood was president of Stonefort.

BY MR. HEDLUND:

Q Is that correct, Mr. Kolbe?

A What? His (indicating Mr. Cusack) statement?

Q Yes.

A I wouldn't know.

Q What position did Mr. Sherwood have at the time you had these discussions with him, if you recall?

A Well, he was the owner—well, he ran them, and—

Q I am sorry, sir. Ran what?

A The coal properties of—he inherited some coal properties and—

Q Could you identify these coal properties in some way, either by the names of the mines or—

A Let's just say extensive coal properties, because I do not know all that he owned, nor do I know that I would have an interest in all that he owned.

[519] I spoke to him about certain properties, but I can't remember what they were, whether—he had a property, for instance, in Fulton County or near Fulton County called Little John, but he wasn't interested in selling to us.

Q Can you recall any other coal company—

A We negotiated with Little Sister. In fact, we negotiated—in fact, we tried to acquire the properties when the original owner died, and Bill Cook acquired them.

Later on—that was in 1944, I think. Later on I discussed with Bill Cook at length acquiring his properties.

Q That is, Little Sister?

A Little Sister, and finally Truax acquired it.

Q Can you think of any other coal company or coal company properties, other than isolated blocks of reserves, that you attempted to acquire?

A Eitelgeorge had a small coal company in Southern Illinois called Unity.

Q Unity?

[520] A I think it was Unity. It might not have been. Peabody later acquired it.

Q Do you recall when this attempt was made?

A I suppose in the 1950's.

Q Are there any other coal companies or coal company properties that you can think of that you made an attempt to acquire?

A Well, I would like to have acquired a property from Ayrshire. I have already talked about the Denmark one. They had a property in Danville, which they called the Harmattan, which means "hot wind" in Arabic.

MR. YOUKER (Official Court Reporter):

How do you spell it in English, please?

BY THE WITNESS:

A H-a-r-m-a-t-t-a-n.

MR. CUSACK: Off the record.

(There was discussion off the record, after which the taking of the deposition was resumed, as follows:)

MR. HEDLUND: On the record.

BY MR. HEDLUND:

Q You have testified that you tried to, [521] get the Denmark acreage?

A Yes.

Q You said, I believe, that you would like to have gotten the Harmattan property.

A Yes.

Q Did you make an attempt to acquire that?

A It never went very far. The reason why I wanted to acquire it was that I thought it an ideal mine for the Wheel. They were working it with two draglines, and I thought a Wheel would be the way to mine it.

Q Do you recall when this attempt was made?

A No.

Q It would have been in the 1950's, would it, Mr. Kolbe?

A It might have been in the late 1940's.

Q The Harmaftan mine is near to what used to be the Mary Moore Mine of United Electric, is that not right?

A That is right, but had no real—the two would be entirely separate. There was also a mine next door to the Mary Moore, a deep mine.

They were mining the same seam as we [522] did, but it was a deep mine. I think we had some talks with them, but I don't remember.

Q Was that the V-Day Coal Company?

A Yes.

Q Mr. Zamberletti?

A Yes.

Q Was he president of that company?

A That is right.

Q Did you ever make any attempt to acquire the company or the properties of Midland Electric?

A No.

Q Is it a fact, Mr. Kolbe, that at one time the United Electric Coal Companies owned the Denmark acreage?

A They could have. I am not sure. There was an Electric Shovel Coal Company before my time, which afterwards became the Ayrshire, and Ayrshire-Patoka. Later it took in Patoka, I think, and I can't testify as to what occurred in the period with those promoters, when those promoters, et cetera, were running the company and Electric Shovel.

MR. CUSACK: Off the record, please.

MR. HEDLUND: All right.

[523] (There was discussion off the record, after which the taking of the deposition was resumed, as follows:)

MR. HEDLUND: On the record.

BY MR. HEDLUND:

Q In any event, you do not recall that that was the fact, while you were either on the board or an officer of United Electric?

A No. That was all in the past.

MR. CUSACK: Page 3 of the 1930 annual report.

BY MR. HEDLUND:

Q Mr. Kolbe, you are aware, are you not, that United Electric filed numerous foreign patent applications in connection with devices used on the Wheel Excavator?

A Right.

Q Was that at your direction?

A Yes.

Q Do you know whether anyone has ever been granted a license under any of the foreign patents that issued following those applications?

A No, but the patents are being used.

[568] Q You, sir, were also an important member of the Research and Development staff? Is that true, sir?

[569] A Yes. That would be true.

Q Is it true to say that between 1945 and 1949, a considerable portion of your time as chief executive officer was involved with the engineering aspects of the Wheel?

A Yes. I have already said that I didn't busy myself much with sales. We had a good Sales Department.

After I had changed the mine managers, we had a good organization at the mines.

We had a good Purchasing Department. We had a good Accounting Department. While I worked on all of these departments, I did devote a great deal of time to new ways of doing things.

I felt that we had to be able to mine high overburden, we had to get the cost of explosives down, and that we had to have a better drill, and there were probably a lot of other things.

Q Did you also have a good Land Department during that period of time?

A Yes, we had a good Land Department.

Q Was Mr. Latimer a member of that department?

[570] A Yes.

Q Was he, in your opinion, a qualified individual, and competent?

A He was a good man to go out and buy land, because he is a man of high integrity and he conveys that impression to people, and he is persistent and so forth.

I think all of our men were good men.

Q Were there—

A I must say on the Land Department that the Operating Vice President also was vitally interested in land. He would not go out and negotiate land, however.

Q With respect to Mr. Latimer, other than the duties involved in going out and securing land, was his competence in other areas as great as that?

MR. CUSACK: What other areas, Counsel?

THE WITNESS: What other areas?

MR. HEDLUND: In any other areas Mr. Latimer may have been involved in.

MR. CUSACK: He testified he was a land man, a competent land man.

* * *

[637] Q —with respect to explosives?

A Yes. I might say that other people tried to get—the final break-through was in [638] Indiana, and they could get no patent on it.

My position with the Patent Office often was this: The Patent Office said, "Everybody knows that." I would say to them, "If everybody knows it, why doesn't somebody use it?"

Well, they just had no answer to that one, but that evidently is—just because everybody knows it and everybody is so smart and has a need for it but doesn't use it, doesn't enable you to get a patent, which I think is an unreasonable position on their part, but it is their position.

Q During your direct examination by Mr. Cusack, you referred to a number of experiments that you conducted with nitrogen tetroxide.

A Nitrogen?

Q Tetroxide.

A Nitrogen—was it penta or tetra? Was it pentanitromethane?

MR. STEVENS: Do you have the page reference, Mr. Hedlund?

BY THE WITNESS:

A Not nitrogen tetroxide.

MR. HEDLUND: Nitrogen tetroxide.

* * *

[654] Q In other words, it is your best recollection that you applied the name "Unimite" to a number of explosives, only one of which was the ammonium nitrate-coal dust-nitromethane composition?

A We might well have used it for the one having fuel oil in it, too. I don't really see why we would change the name.

We weren't advertising it to the general public. We were just using it for our own purposes.

Q It is true, is it not, that the composition ammonium nitrate, coal dust and nitromethane was not of your invention?

A No. That is not true. I am the only person, as I remember it, who ever used ammonium—who ever put in the nitromethane.

MR. CUSACK: Mr. Hedlund, the Government fails to see the relevancy of this line of questioning, which we feel continues to attempt to impeach the witness on irrelevant, and at best remote and collateral matters which are not probative to any of the issues in this lawsuit. We therefore move to strike, and I [655] object to any further examination along these lines.

MR. HEDLUND: I again bring to your attention, Mr. Cusack, that at various places in the record it was you who brought up Unimite, and I am attempting to try to find out what the facts were.

BY MR. HEDLUND:

Q Mr. Kolbe, do you know who Robert W. Lawrence was?

A No.

MR. HEDLUND: Mr. Youker, will you please mark for identification as Kolbe Deposition Exhibit S, a copy of United States Letters Patent No. 2,325,064, under date of July 27, 1943, entitled, "Explosive Composition, Robert W. Lawrence, Wilmington, Delaware, assignor to Hercules Powder Company, Wilmington, Delaware, a corporation of Delaware."

(The document was thereupon marked Kolbe Deposition Exhibit S for identification, 10-28-68.)

MR. HEDLUND: Having done so, would you tender Kolbe Deposition Exhibit S to the [656] witness, please.

(There was a short interruption, after which the taking of the deposition was resumed, as follows:)

BY MR. HEDLUND:

Q Mr. Kolbe, I direct your attention to Column A of Table 1 appearing on Page 2 of Kolbe Deposition Exhibit S.

MR. CUSACK: Counsel, are you marking for identification, the covering memorandum on these Letters Patent?

MR. HEDLUND: Not at this time.

MR. STEVENS: You are directing his attention to Column A?

MR. HEDLUND: Column A of Table 1 on Page 2.

THE WITNESS: What page?

MR. HEDLUND: Page 2.

(There was a short interruption, after which the taking of the deposition was resumed, as follows:)

BY THE WITNESS:

A All right.

BY MR. HEDLUND:

Q Does this refresh your recollection, Mr. [657] Kolbe, that in point of fact the explosive consisting of nitromethane, ammonium nitrate and coal dust was in fact the invention of one Robert W. Lawrence, assigned to Hercules Powder Company?

MR. STEVENS: Mr. Hedlund, first of all, the table to which you have referred does not refer to coal dust. I do not know what it is. It certainly has to be read in context with the entire application.

I suggest that you take the time to read such portion as you need to, Mr. Kolbe, to answer the question.

BY THE WITNESS:

A This has only—this doesn't have kerosene in it or coal dust, as pointed out. It uses nitromethane.

I tried to get a patent on this, did I not? Did you just read where I did?

MR. HEDLUND: No, sir, you did not, not on this composition.

BY MR. HEDLUND:

Q Would it help to refresh your recollection if I informed you of the fact that the company took a license from the Hercules Powder Company with [658] respect to this formula upon which United Electric was required to pay a royalty?

A We took a license from—let's see. Hercules worked with Akre in Indiana, and they used simply ammonium nitrate, as I remember it, and coal dust.

As I remember it, though, they gave us that license in return for my patent on a container.

Q That had nothing to do with Unimite, did it, Mr. Kolbe?

A It was simpler, you see. It left out the nitromethane and just used coal dust, as I remember it. When was this license taken?

MR. HEDLUND: In that connection, I state for the record that the license agreement with Hercules Powder Company was dated May 1st, 1956, and revised under date of June 27, 1956, and I would like to have Mr. Youker mark as Kolbe Deposition Exhibit T, a two-page letter from, I believe, Mr. LeRoy Keane, Assistant General Manager of Hercules Powder Company, to The United Electric Coal Companies, dated June 27, 1956, directed to the attention of Mr. Frank F. Kolbe, and also signed by Mr. Kolbe on the [659] second page thereof, and having done so, Mr. Youker, would you tender it to the witness, please.

(The Document was thereupon marked Kolbe Deposition Exhibit T for identification, 10-28-68.)

(There was a short interruption, after which the taking of the deposition was resumed, as follows:)

MR. CUSACK: I note, Counsel, on the second page it states:

"Agreed to this 9th day of July, 1956, The United Electric Coal Companies, by Frank F. Kolbe."

MR. HEDLUND: Fine, sir. Thank you.

MR. CUSACK: Counsel, may I read the second paragraph on the first page of Kolbe Deposition Exhibit T into the record?

MR. HEDLUND: I would be more than happy to have you do so, Mr. Cusack.

MR. CUSACK: The second paragraph states:

"Hercules Powder Company hereby waives the royalty payment of three-quarters of one cent per pound of explosive composition [660] resulting from the practice of the inventions claimed in United States Letters Patent No. 2,325,064, made and used by you, which would become due under the reference license agreement, so long as Mr. Frank F. Kolbe continues the development and experimental work in the practical application and use of explosive compositions covered by United States Letters Patent No. 2,325,064 at the facilities of The United Electric Coal Companies, and so long as you make available to Hercules for its unlimited use written reports of such development and experimental work, and so long as you permit authorized representatives of Hercules Powder Company at Hercules' election, to visit your plants and observe such development and experimental work. You further agree to grant and do hereby grant to Hercules an irrevocable, non-exclusive, royalty-free license, with the right to grant sub-licenses without accounting to you, under any invention first conceived or reduced to practice by you [661] in the performance of the development and experimental work contemplated by this agreement, but such license shall be limited to those inventions conceived or reduced to practice while this letter agreement is in effect."

Thank you.

MR. HEDLUND: Will counsel stipulate that the patent referred to in this letter is the patent that we have had marked as Kolbe Deposition Exhibit S?

MR. CUSACK: It certainly is. It has the same number.

BY MR. HEDLUND:

Q Does this refresh your recollection, Mr. Kolbe, that with respect to the explosive that I believe you have testified for at least a while was referred to as Unimite, consisting of nitromethane, coal and ammonium nitrate, was used by you under license from Hercules Powder originally on a royalty basis and subsequently on a royalty-free basis as long as you complied with the conditions set forth in Kolbe Deposition Exhibit T, which Mr. Cusack has just read into the record?

[662] MR. STEVENS: Mr. Hedlund, I have to object to that long question. You have assumed in your question that royalties were paid prior to the receipt of this letter, and there is no such testimony that I am familiar with. Now, you gentlemen—

MR. HEDLUND: I meant to say—

MR. STEVENS: I think you should ask him that before you assume it in your question.

MR. HEDLUND: All right.

BY MR. HEDLUND:

Q I will ask you, then, Mr. Kolbe, if prior to this letter you were paying royalties to Hercules.

A No.

Q Do you recall that prior to this letter you had a license agreement with Hercules?

A No. I do not recall having a license agreement with Hercules.

Q Do you recall, after the date of this letter, whether or not you continued the development and experimental work in the practical application and use of explosive compositions covered by the patent referred to in Kolbe Deposition Exhibit T?

A Yes, we did—wait a minute. We went [663] ahead

with what we were doing on nitromethane and ammonium nitrate and with coal and oil.

Q Do you recall whether or not—

A It is my remembrance that we had gone ahead with this for some time before any of this ever came up and before I knew about their work. Now, do you know when we started using this material?

Q You will recall, Mr. Kolbe, the reference in the 1956 annual report of United Electric, on Page 9, which states as follows, in part:

"The cost of this operation was substantially reduced when we inaugurated the use of a new explosive a year ago. After years of research"—

A Yes. We were doing work on that probably before we ever inaugurated the use of it.

We hired—as appeared from Huey's letter, we hired Mr. Damon, we made a contract with Glenn Damon in the Bureau of Mines, by which they conducted work on explosives for us, and I don't know when all that would have happened.

Q I will continue on a little bit from Page 9 of the 1956 annual report, which states in part:

"After years of research we discovered [664] this compound called Unimite, which had the qualities of strength, compactness and safety, so valuable for our needs."

In addition, Mr. Kolbe, I would like to inform you that the records of United Electric indicate that the use of Unimite, including nitromethane, or rather, consisting of nitromethane, coal and ammonium nitrate, was the company's principal explosive beginning on July 14, 1955, and continuing through May of 1958, and on May 16, 1958, the company began using prilled nitrate and fuel oil as an explosive.

A It doesn't say, though, when we originally got the—when I originally got the idea of using this stuff.

Q No, it certainly does not, Mr. Kolbe, and I think what you have just said is consistent with the statement

on Page 9 of the 1956 annual report, starting with, "After years of research . . ."

A At the time we started using this, we certainly had no intention of getting into any dispute with anybody on any patent. If we had known about it, we would have said so.

Q Do you recall why the company stopped [665] using a nitromethane explosive?

A I think there were two reasons. One reason was that it was discovered that in holes of our size, you didn't have to use it, that you could just use prilled ammonium nitrate, and as a matter of fact, I think we always used prilled ammonium nitrate and simply fuel oil, and that was one reason.

Another reason was that in shipping this nitromethane to automobile factories, where it was used as a solvent for pigments, they banged a car of it into another car, and it went bang.

Q That was at Effingham, was it, sir?

A I think so, although I don't know just where it was. But anyway, that was discouraging.

We had previously considered it just not explosive, and so had the automobile plants, and so had Commercial Solvents. The reason for this I don't believe was ever discovered, but there it was.

It might have been due to impurities in it, I don't know. Impurities make a great deal of difference in these substances.

I might say further, showing our care, that in spite of all of the work we did on explosives, [666] we never ourselves had a single accident in all of this work that I did.

.

[672] MR. HEDLUND: And your third answer on Page 189, and continuing over to Page 190.

(There was a short interruption, after which the taking of the deposition was resumed, as follows:)

BY THE WITNESS:

A Yes.

BY MR. HEDLUND:

Q You state, Mr. Kolbe, on Page 188, in part:

"... so we talked to the Aluminum Corporation of America about establishing a big aluminum smelter either in St. Louis or along the Mississippi there, or in Perry County, right at our mine."

Is it not a fact, Mr. Kolbe, that at the time you originally talked to Aluminum Corporation, they had a smelter in St. Louis, if you recall?

A They had an aluminum oxide plant there. I am not sure whether they had anything more or not.

Q Do you recall whether at that time United Electric was selling coal to the Aluminum Company facility in St. Louis?

A Yes, we were—that is, we did from time [673] to time.

* * *

[684] MR. STEVENS: —that your objective is [685] best accomplished by saying, looking at the documents you have shown him and the testimony which you just re-read, is there anything else?

MR. HEDLUND: That is what I am trying to do, and I thought I had done that.

MR. STEVENS: All right.

(There was a short interruption, after which the taking of the deposition was resumed, as follows:)

BY THE WITNESS:

A I don't remember (b), which is given here.

MR. HEDLUND: That is on—

MR. STEVENS: Referring to the letter of December 13, 1962.

MR. HEDLUND: All right.

BY THE WITNESS:

A What I remember is (a), if Alcoa—I would like to go back to the beginning of the deal.

We had large reserves at Fidelity. I was trying to

find a market for them. We wanted to negotiate. We wanted to get Alcoa interested in buying coal from us.

They objected that our reserves would not last the life of what they wanted to do, so we [686] suggested that we would buy additional reserves, deep coal, to the north of us. That was done.

We had no strings whatsoever on that deep coal, but we thought that they would first use our coal because it would be cheaper. It was logical that they would.

MR. HEDLUND: I am sorry.

BY MR. HEDLUND:

Q By "our coal", you mean at Fidelity?

A At Fidelity mine, yes.

Q All right.

A And when that coal was exhausted, if they needed more, they would give us serious consideration for mining the other, and also, that if they ever sold it, as was covered in that agreement, they would give us the first chance of buying it.

Now, that was the whole thing, and we didn't go into that if we came to a specific proposition for leasing part, Alcoa is willing to consider seriously such a lease. We didn't go into that. I didn't go into that.

I wasn't considering that we would—the coal was purchased for possible use for their aluminum plant. If they didn't want it, they would [687] first consider us as a purchaser, and that, I suppose, would cover the matter in (b), but it was not exactly stated the way it is in (b).

[734] BY THE WITNESS:

A (Continuing) I don't know whether this is the time to go into the whole coal history or not, but you must remember that the coal industry is a tough industry and that many people have gone broke in it.

MR. HEDLUND: Yes, I understand that.

BY THE WITNESS:

A (Continuing) Therefore, you don't indulge in the expansion. It's quite a venture, this expansion in the coal industry.

BY MR. HEDLUND:

Q Directing your attention to the first full paragraph on Page 3 of Kolbe Deposition Exhibit Y, do you know whether as of 1956 the competitors of United Electric had better organization for prospecting than United Electric did?

MR. STEVENS: Mr. Hedlund, I think it is only fair to ask you to explain to the witness what you mean by "competitors." Do you mean what Mr. Latimer meant, or do you have a different meaning in this lawsuit, or—

[735] MR. HEDLUND: I have no meaning at all. I believe Mr. Kolbe has testified as to who he believes the competitors of United Electric were. He certainly understood what the word "competitors" meant when Mr. Cusack asked him, and I will use it in the same sense that Mr. Cusack asked him, so that he can understand what I mean by my question.

MR. STEVENS: That does not really help me very much.

Could I have the question again, please.

Q (Read by the reporter.)

MR. HEDLUND: If you would prefer, Mr. Stevens, I can ask him with reference to specific companies. I think that might prolong it.

MR. STEVENS: If he can answer—

THE WITNESS: Let's just answer this.

BY THE WITNESS:

A In Fulton County, let's just take that, I have given you the amount of coal, and you can determine the exact, that we acquired after 1939 for the Buckheart Mine. It was twenty, thirty [736] million tons. The Little Sister, our next competitor—or next field to us—acquired relatively very little, I think, in addition to the field that they were right in.

* * * *

[758] Q Following July 31, 1959, there were five new directors appointed, or rather elected, to the Board of United Electric; that is so, is it not?

[759] A Yes.

Q Were you in favor of that or opposed to it?

A I would much rather have kept my former group of directors, of course, because we would then have gone ahead with the Industry Field and done other things.

Q Following July 31, 1959, Mr. John M. Morris was appointed or elected President of the company and its chief executive officer?

A Yes.

Q Was that with your approval?

A I would rather, if a change were made, and I would have been sharply in favor of a change when I got through with the Banner Mine, I would rather have had Arnold Lamm as President—not as President but as chief executive officer. I told Arnold that, but in the first place, Arnold would not have accepted it because Arnold is a very, very independent person, and he would not have accepted the dictation from Material Service.

I would have been in favor of having Johnny Morris—I would have made Lamm Chairman and * * * chief executive officer. I would have [760] been in favor of making John Morris President because he has been an excellent sales executive, he is perhaps more than a sales executive, and he is perhaps more than a sales executive, but I didn't think he had the mining experience and the drive to establish new mines and that is what Arnold would have brought to the picture.

Q I may have asked you this before, sir, but if not, following Mr. Morris' appointment as President, did you nevertheless continue active in the management of the company?

A I did some things. There's always a question whether you should get out or whether you should stay. If you get out, like the refugee in Germany or whatnot during the Nazis, if you get out you are powerless to influence events. You get out, you save your reputation, you do a lot of things, but you are out and you cannot influence events. My friends still had and I still had a big investment in the corporation. I stayed.

It turned out to be a very good thing that I did, because Tom Tarzy got a contract with Commonwealth Edi-

son. Before that time we [761] had a contract with Commonwealth Edison which called for from 750,000 to a million and a quarter tons. Tom worked out a contract with them for 1,750,000, to two and a quarter million tons.

.

[816] Q Do you have an opinion, Mr. Kolbe, given existing prices for labor, machinery and equipment, and the present condition as it is known in the Industry Field of United Electric, what it would cost to mine that coal per ton?

A Not under today's condition; I don't know what costs are today.

I pointed out the other day, however, that its competitive conditions have been improved by the recent wage agreement.

Q There might be a question, might there not, however, whether its competitive position had been sufficiently improved?

A We thought it a good field in 1959, all of us did, and I think I have seen nothing to make me think it isn't a good field today.

I might say that at some time in the past I told Mr. Nugent that if he didn't like the field and wanted to get out of it, that I would try to find him a purchaser for it. He did not care to sell it.

Q Does that offer still stand, sir?

A I would try to find him a purchaser for it. Yes, it does.

.

[903] A I would like to call your attention that the retail deliveries of coal to other consumers, which would cover those for household use—well, it would cover the customers of Buffalo Creek Coal, [909] that in 1944 it hit a top of 122,112,000 tons, that every year after that, right down to 1965, is less until in 1965 it was 19,048,000.

BY MR. CUSACK:

Q Would that, Mr. Kolbe, account for the discontinuance of the Buffalo Creek operations?

MR. HEDLUND: I object to that as being suggestive and leading.

BY THE WITNESS:

A (Continuing) It was one of the reasons for the market was disappearing. Another reason for our closing the mine was it was not worth while to bring in bigger equipment that could have handled higher overburden.

MR. CUSACK: Thank you, Mr. Kolbe.

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EXCERPTS FROM DEPOSITION OF
ROBERT H. INMAN, TAKEN NOVEMBER 4, 1968

* * * *

[5] I did have a stint in the service. I was a navigator with the 8th Air Force in England.

Q By whom were you employed prior to your employment by Material Service Corporation?

A The United Electric Coal Companies.

Q For how long were you employed with The United Electric Coal Companies?

A Except for three months in 1955, I was there for twenty years, from March 1st, 1948, until April 1st, 1968.

Q Did you work for any other coal companies prior to your association with United Electric?

A No.

Q Did you have any other mining experience before your employment with United Electric?

A No.

Q Mr. Inman, have you had any conversations with Mr. Hedlund or any of the other attorneys for any of the defendants during the past few days or past few months?

A Yes, I have.

Q Did you talk about this case?

A Yes.

* * * *

[7] Q Did you talk about the feasibility of United Electric becoming an underground miner?

[8] A No, we did not.

Q Have you had any conversations with Mr. Morris in regard to this case?

A No, I have not.

Q Have you had any conversations with Mr. Camicia in regard to this case?

A Not in the last year.

Q Did you discuss with Mr. Nugent the testimony he gave during his deposition?

A No, I did not.

Q When you first were employed by United Electric, what was your position?

A Field Engineer.

Q What responsibilities did that entail?

A Particularly surveying and keeping the inventories of the various mines in the Fulton County area.

Q What position did you hold after you were a field engineer?

A Chief Mining Engineer.

Q When did you assume that position?

A Approximately in 1957.

* * *

[11] MR. CUSACK: Off the record, please.

(There was a discussion off the record, after which the taking of the deposition was resumed as follows:)

MR. FUTTERMAN: Back on the record.

BY MR. FUTTERMAN:

Q Who is Pona Eaton?

A I know him. He was a drill foreman prior to my taking the position.

Q When did you cease to be Chief Mining Engineer of United Electric?

A December, 1964.

Q Did you hold any other position with United Electric after that date?

A I was General Superintendent for a year and then Vice-President of Operations.

Q During your tenure as General Superintendent, to whom did you report?

A John Morris.

Q Was he President at that time?

A Yes, he was.

Q Who reported to you in that position?

A The mine superintendents and various staff people.

[12] Q When did you assume the position of Vice-President?

A I think it was in December, 1965, the following year.

Q Did you have a more specific title than Vice-President?

A Vice-President of Operations.

Q How long did you hold that position?

A Until April of this year.

Q To whom did you report when you were Vice-President of Operations?

A The first year I reported to Mr. Morris, until he retired. Then I reported to Mr. Nugent.

Q Whom did you supervise in your position as Vice-President in charge of Operations? In other words, who reported to you?

A The mine superintendents and my staff.

Q Who succeeded you as General Superintendent?

A The man who succeeded my position, but not with the same title, was R. F. Donaldson.

Q What title does he have?

A General Manager, Strip Mining.

* * *

[14] BY MR. FUTTERMAN:

Q Is he still employed by United Electric?

A He passed away. He was killed.

Q When you were General Superintendent, who did Mr. Latimer and Mr. Jensen report to?

A To me.

Q When you were Vice-President in charge of Operations, who did Mr. Latimer and Mr. Jensen report to?

A To me.

Q When you assumed the position of Vice-President in charge of Operations, were the duties of the General Superintendent combined with the duties of the Vice-President in charge of Operations?

A Yes, they were.

Q Do you know whether or not Mr. Hepburn had any deep coal experience?

A Not to my knowledge.

Q Would you say from your experience that it would be possible for a strip man to make an evaluation of underground mining equipment in a particular mine?

MR. KEMPF: May I have that question [15] read back, please, Mr. Youker.

Q (Read by the Reporter.)

MR. KEMPF: I am going to ask you to define what you mean by "strip man."

MR. FUTTERMAN: A man who has had essentially all of his mining experience in strip coal mining.

THE WITNESS: Could I have that question back again, please?

MR. FUTTERMAN: Would you read the question again, please, Mr. Youker.

Q (Read by the Reporter.)

BY THE WITNESS:

A I would not rely on his evaluation. I would say it would be possible but not probable.

BY MR. FUTTERMAN:

Q Did you ever have any deep coal experience?

A No, I did not.

Q Did United Electric Coal Companies at one time consider purchasing the Kerr Coal Company in Colorado?

A Could I have that question again, please?

MR. FUTTERMAN: Will you read the question, please, Mr. Youker.

* * *

[29] MR. FUTTERMAN: Will you read the question to the witness, please, Mr. Youker.

Q (Read by the Reporter.)

BY THE WITNESS:

A My testimony is that I am a strip miner and I took the advice of so-called deep mine experts for this answer, and they advised me that it was unprofitable under the conditions that prevailed.

BY MR. FUTTERMAN:

Q Were there any other reasons, other than the unprofitability of the underground mine, that prompted United Electric to reject the purchase of the Kerr Coal Company?

MR. KEMPF: I think the witness has already answered that. He pointed out, for instance, the lack of reserves that you asked him about, any additional reserves.

BY THE WITNESS:

A This was not a normal deep mine operation. Where they were mining at the time, I think there was about 5,000 foot of cover, and it was having roof falls. With these kind of operating obstacles, we did not want to take a chance.

[32] Q Do you know if they own sufficient acre-
[33] age so that they could justify opening a mine in that area?

A Could I have that question back, please?

MR. FUTTERMAN: Will you read the question to the witness, please, Mr. Reporter.

Q (Read by the Reporter.)

BY THE WITNESS:

A No. I do not know.

BY MR. FUTTERMAN:

Q Did United Electric believe that it would have difficulty in economically producing coal in any No. 2 coal field?

A Could I have that question again, please?

MR. FUTTERMAN: Will you read the question to the witness, please, Mr. Youker.

Q (Read by the Reporter.)

BY THE WITNESS:

A There are some that we would feel that way about, yes.

BY MR. FUTTERMAN:

Q Where would they be located?

A The Sepo Field, which is near Lewistown, Illinois. The Roodhouse Field we investigated. There is an area at Mount Sterling that we have [34] dropped.

There is an area at Jacksonville, surrounding the bluff, that we thoroughly investigated and dropped. We dropped the Ottawa area and the Augusta area. That is all I can recall at this time.

Q In what county is the Augusta area?

A I do not remember. It is west of McDonough County.

Q Why was United Electric unable to put together a coal field at Roodhouse?

A The No. 2 coal is an erratic coal that cuts in and cuts out, goes up and down. We are leery of mining any coal, any No. 2 coal, after you get over 65 feet of overburden, because of the thinness of the coal. We could not acquire enough tonnage to justify the field.

Q Do you mean that you could not acquire sufficient tonnage at the Roodhouse Field to open a field?

A Commercially strippable.

* * *

[54] Q Would it be possible to tie up coal in the Augusta area with the Industry Field?

A This was our first effort. I do not think it worked out.

Q Why was that?

A The coal did not go through.

Q Do you recall the tonnage figure for the Augusta area?

A No, I do not.

Q Could you give us any kind of an approximation?

A We were hoping for twenty million. I think it is less than ten.

Q Would that be the total field, or would that only cover those properties which United Electric leased or took options on?

A This would be the figure we would desire to own or control.

Q Who is Dale Emling?

A Chief Mining Engineer, United Electric.

Q Did you order Mr. Emling to make a thorough study of the actual strippable reserves in the Augusta area?

A I think I did. I cannot remember exactly. [55] I am sure I did.

Q Did he make such a study?

A I assume he did, yes.

Q Do you recall whether or not he was able to arrive at a tonnage figure for the Augusta area in this study?

A I think he arrived at a tonnage figure, yes.

Q What was that?

A I think approximately ten million tons. I do not recall exactly.

Q Excuse me?

A I think it was ten million.

Q I see.

A I do not recall.

Q You also mentioned that United Electric had done some prospecting in Jackson County.

A I said near Jacksonville, Illinois.

Q Well, did United Electric at one time investigate strip coal in an area near Murphysboro, Illinois?

A Yes.

Q In Jackson County?

A Yes.

.

[60] Q Is that in Brown County?

A I am not up on my counties. I am sorry.

Q Do you recall how many tons were beneath an overburden of less than 100 feet?

A My memory is not the best on this, but I would say approximately five million tons.

Q Did United Electric explore an area south of the Illinois River as a potential addition to the Banner mine?

A Unofficially, yes.

Q What do you mean by "unofficially"?

A We did not do it in United Electric's name.

Q In whose name did you do it?

A We drilled on someone else's options.

Q Whose options were they?

A I think they were CILCO's options. They were looking for a gas dome and they wanted to drill on our property, so we asked them if we could drill on their property in exchange.

Q "CILCO" is Central Illinois Light Company?

A Yes.

Q Did you find any coal under their options?

[61] A Not too large of a tonnage. We are still interested in the area. We do not want everyone else to know about it.

Q Do you recall approximately how many tons were found there?

A On their properties, approximately five million tons. We are in hopes of obtaining another five million tons.

Q Are these contemplated as future additions to the Banner Mine properties?

A They have not been properly explored, as we only drilled on options that CILCO had. It appeared that if there was coal there, it would be toward the town of Havana, and I think there is a duck hunting preserve down there.

Q Is this a public or private duck hunting preserve?

A I think there are both there.

Q Excuse me? I did not hear you.

A I think there are both in the area.

Q Do you know whether or not United Electric intends to further explore this area?

A I would say they should.

MR. FUTTERMAN: I suggest we take a few [62] minutes' recess.

MR. KEMPF: All right.

(Whereupon a short recess was taken after which the taking of the deposition was resumed as follows:)

MR. FUTTERMAN: On the record.

BY MR. FUTTERMAN:

Q Mr. Inman, I now hand you what has previously been marked for identification as Nugent Deposition Exhibit 38, which is part of a map entitled, "Shipping Coal Mines in Illinois", and ask you if you can identify the county in which the Central Illinois Light Company leases are located.

A I do not know whether they still have the leases or not.

Q The county where they were located when United Electric did the drilling.

A The leases that we drilled on were mainly in Tazewell County. They may have one or two in Mason County.

Q Is that right across the river from the Banner mine?

A Near enough that we would like to process [63] the coal in the Banner mine.

Q Could the coal be transported across the Illinois River by conveyor belt, from Tazewell County to the Banner plant?

A We would have to get the Corps of Engineers' approval.

Q If you could not get that approval, would there be another way of getting that coal across the river?

A There may be other ways, but not as economical.

Q Would you, then, ask the Corps of Engineers for permission to construct this conveyor across the river?

A That would be our first step, yes.

Q Then the conveyor would be the preferred method of getting the coal across from Tazewell County?

A Yes, it would, in my estimation. I am not with the coal company any longer.

Q Mr. Inman, do you recall whether or not United Electric investigated an area entitled the Salt Fork Field?

A Is this the field that could be close to [64] Catlin, Illinois?

Q Yes.

A Yes, we did.

Q Do you recall when the investigation was made?

A In my estimation, it would be 1956.

Q Do you recall the tonnage that was estimated to be in this field?

A It was several years ago, and I could not give you an exact figure, but it was an appreciable tonnage.

Q Would 35,000,000 tons refresh your recollection?

A It sounds reasonable, yes.

Q Did United Electric take any options in this area, or any leases?

A Yes, it did.

Q What happened to those leases and options?

A Could I have that question read again?

MR. FUTTERMAN: Would you read the question, please, Mr. Youker.

Q (Read by the Reporter.)

BY THE WITNESS:

A To my knowledge they were dropped when [65] the date was up.

BY MR. FUTTERMAN:

Q What was the reason or what were the reasons for terminating these leases and options?

A As you know from the date, this was before my being involved in the overall planning. I could not give you a definite reason.

Q Do you recall the date when these leases and options were dropped?

A We usually obtained options for approximately one year. I do not recall the exact dates.

Q But it is your recollection that the area was investigated around 1956?

A Yes, sir.

Q So would it be fair to state that the options and leases would have been terminated somewhere around 1957?

A Yes, sir.

Q Do you recall why United Electric decided to drop the leases and options in this area?

MR. KEMPF: I object. I think you have asked him and he has answered that question already.

MR. FUTTERMAN: Would you answer the [66] question, please.

THE WITNESS: Could I have the question again?

MR. FUTTERMAN: Read the question, please, Mr. Youker.

Q (Read by the Reporter.)

BY THE WITNESS:

A Only by hearsay.

BY MR. FUTTERMAN:

Q What did you hear?

A That we did not have any machinery that would handle this material.

Q When you speak about "material", are you referring to the overburden?

A Yes, sir.

Q What do you mean by "handling" it?

A That the depth of the overburden was too high for the machinery that we had available at that time.

Q What was the depth of the overburden?

A Well, you are taking me back quite a few years, but I assume that it started about 60 feet, and as you progress westerly, it goes up to 150 to 200 feet.

[67] Q Would present stripping machinery be capable of mining some or all of the coal in the Salt Fork Field?

A I would have to review the drilling, but I would say yes.

Q Can you recall whether or not there would be sufficient tonnage in the Salt Fork Field which could be mined by present available stripping machinery?

A I would like to review the maps before I would answer that.

Q Mr. Inman, are you certain that United Electric dropped all of the options and leases it had in the Salt Fork Field after one year, after holding them for one year?

A I could not swear to that.

Q So that it is possible that some of these options and leases may have been continued beyond the one-year period that you referred to?

A It is possible, yes.

Q Do you recall approximately how far the Salt Fork Field was from the Mary Moore mine?

A Approximately four miles.

Q If sufficient tonnage had been available [68] in the Salt Fork Field to justify a mining operation, could the coal have been processed through the Mary Moore facilities?

A On a small scale. This was a very small plant.

Q Well, if sufficient coal were found in the Salt Fork Field to justify mining, would it have been feasible to expand the facilities at the Mary Moore mine?

A I would say yes.

Q In your opinion, and in the light of the technological advances that have been made during the past ten years in stripping equipment, would it be reasonable to go back to the Salt Fork Field and take another look as to whether or not it could possibly be mined?

MR. KEMPF: If that field was available?

BY THE WITNESS:

A If the field is available, yes.

BY MR. FUTTERMAN:

Q Do you know if the field is available?

A Only by hearsay, I hear that it is not. I do not know for a fact.

Q Do you know or have you heard who owns [69] the field now?

A I understand, and I only heard this, that Ayrshire picked it up.

Q Do you know approximately when they picked up the Salt Fork Field?

A Just as an estimate, in 1960 or 1961, and this is only an estimate.

MR. FUTTERMAN: Just one moment, please.

(There was a short interruption, after which the taking of the deposition was resumed as follows:)

BY MR. FUTTERMAN:

Q Mr. Inman, did United Electric ever make an offer to Illinois Power Company to mine coal that was owned by Illinois Power Company adjacent to their Vermilion plant?

A I do not know whether we made an offer or not.

Q Did you investigate this possibility?

A We drilled their property.

Q What were the results of that drilling?

A High overburden and a poor type of overburden, to my recollection, of high sand content.

* * * *

[84] Q When the ratio for strip coal is so high that the feasibility of economically mining [85] the coal—withdraw that.

Do you recall how many tons were involved at the Petersburg, Indiana, property?

A No, I do not.

Q Was any utility planning to build a new power plant near the Petersburg, Indiana, Field?

A This was my understanding.

Q Do you know which utility that was?

A Some utility in Indiana. I do not recall the exact name.

Q Do you recall whether or not the utility eventually built a plant near the Petersburg Field?

A Not to my knowledge.

Q Where is the Belle Rive Field located?

A I think it is approximately 20 miles southeast of Mount Vernon, Illinois.

Q What kind of coal was present at Belle Rive?

A Coal miners have a certain name for it that I do not want to use right now, but I do not think it has a designation.

Q Was it strip coal?

A Partially.

[86] Q Part of it was underground?

A Part of it had a very high ratio.

Q Do you recall the tonnage figure for that field?

A No, I do not.

Q Do you recall the coal thickness?

A Not exactly.

Q Could you give us your best recollection of that figure?

A Under 30 inches.

Q Do you recall the average overburden depth?

A No, I do not.

Q In regard to the thickness, do you mean that the coal was 30 inches thick, more or less?

A Less than 30.

Q How much less?

A I do not recall how much less.

Q Was it more than two feet?

A No, it was not.

(There was a short interruption, after which the taking of the deposition was resumed as follows:)

[87] BY THE WITNESS:

A I want to ask a question. When you say "Was it more than two feet", you asked me if it was less, was it more than two feet, it is confusing to me.

MR. KEMPF: I suggest that the Reporter read back the question.

Q (Read by the Reporter.)

MR. KEMPF: Mr. Reporter, will you read the prior questions and answers concerning the 30 inches thick.

(The record was thereupon read by the Reporter as above recorded.)

MR. KEMPF: Does that clear it up in the witness' mind?

MR. FUTTERMAN: I will ask the question again.

BY MR. FUTTERMAN:

Q How much less than 30 inches is the thickness of the coal at Belle Rive?

A I do not recall.

Q Is the thickness greater than two feet?

A I do not recall exactly. I think it was.

Q Do you recall whether or not United [88] Electric, in its analysis of the Belle Rive Field, segregated the coal deposits into those deposits beneath 40 feet of overburden and those deposits beneath greater than 40 feet of overburden?

A I do not recall that we did do that.

Q Does that distinction have any meaning to you?

A Not those particular figures, no.

Q Why was the Belle Rive area ultimately rejected?

A Our feeling was that there was not enough strip-pable coal there to open an operation.

Q When did this investigation take place?

A In 1963 or 1964.

Q Was the Belle Rive Field investigated at the same time that the Petersburg, Indiana, properties were evaluated?

A No, it was not.

Q When were the Petersburg properties evaluated?

A One or two years prior.

Q Is it not a fact that another coal producer picked up the Belle Rive Field?

[89] A Not to my knowledge.

Q Have you heard about any coal producers drilling in the Belle Rive area subsequent to United Electric's evaluation of the area?

A No, I have not.

Q Did United Electric explore any coal fields in Sebastian County, Arkansas?

A Not to my recollection.

Q Have you ever heard of W. B. Hillery?

A Yes, I did.

Q Do you know with what company he is associated?

A I think he is dead.

Q Excuse me?

A I think he is dead.

Q Do you know with what company he was associated?

A I think we had him on a retainer to watch some of our properties.

Q Have you ever heard of the Greenwood Cut Stone Company?

A No, I have not.

* * * *

[105] Q Who was on the board of directors at that time?

A I think they lacked aggressiveness since 1940. I could not tell you who it was.

Q Was Mr. Hepburn the Operating Vice-President during all of that period?

A No, he was not.

Q When did he become Operating Vice-President?

A 1955.

Q Who preceded him as Operating Vice-President?

A Mr. Pinckney.

Q Is he still alive?

A No, he is not.

Q Who was the President of United Electric during this period?

A For the first part of the period it was Mr. Kolbe. During the latter part it was Mr. Morris, until last year.

Q When did Mr. Morris become President?

A I do not remember the exact date.

.

[112] Q Is it not a fact that he prepared a [113] report on a proposed high wall operation at the United Electric Fidelity mine in DuQuoin, Illinois?

A He may have referred to one operation in that manner and made a survey.

I was with him when he visited our mine for that purpose, but I still do not understand this terminology.

Q How many tons did he estimate to be available for mining purposes by this high wall method

A I do not remember the tons he would estimate.

Q Does United Electric currently plan to mine this coal?

A Where Mr. Matheson made his survey?

Q Yes.

A No.

Q Why not?

A Well, I think it is covered with water now. It was too small a tonnage to purchase equipment and start an underground operation.

.

[134] BY MR. FUTTERMAN:

Q Would it be more desirable for United Electric to plan future mining operations in central and southern Illinois as opposed to Fulton County?

MR. KEMPF: I would like that question read back, if I may, Mr. Youker.

Q (Read by the Reporter.)

BY THE WITNESS:

A I still do not understand the question. When you say "plan", what has that got to do with the mining? I do not think I can answer that question.

BY MR. FUTTERMAN:

Q Would United Electric realize greater profits by developing mining fields or mines in central and southern Illinois as opposed to Fulton County?

A Not in my opinion.

Q Why not?

A It is difficult to plan mining anywhere, where there are no reserves. I do not know of any reserves in central or southern Illinois available to plan to mine. Therefore, I feel that we should [135] continue mining central Illinois, or Fulton County, Illinois.

* * *

[139]

ROBERT H. INMAN,

called as a witness by the plaintiff herein, having been previously duly sworn, was further examined upon oral interrogatories and he did thereupon depose and testify further as follows:

DIRECT EXAMINATION

(Continued:)

BY MR. FUTTERMAN:

Q Mr. Inman, how many tons of coal are there in the Beaucoup Field?

A I do not remember.

Q Do you know if there is any strip coal in the Beaucoup Field?

A Not in what I know as the Beaucoup Field, no.

Q What do you conceive the Beaucoup Field to be?

A This was an area that United Electric was acquiring property for The Aluminum Company, and they outlined the area they wanted reserves acquired in.

Q Was this Alcoa?

A Yes. I think it was.

* * *

[155] Q Would United Electric control both the [156] Round Prairie and the Beaucoup Field but for the arrangement with Alcoa?

A Not in my opinion.

Q Why not?

A I have been advised that we have no rights to it.

Q What?

A We have no rights to it.

Q Who advised you that you had no rights to it?

A Our law firm.

Q You mean you have no rights to the coal?

A That is correct.

Q I am asking you to make an assumption that had United Electric not had any kind of an arrangement with Alcoa, would United Electric have taken the leases and options in the Beaucoup Field for United Electric?

MR. KEMPF: Let me have that question again, please, Mr. Reporter.

Q (Read by the Reporter.)

MR. KEMPF: Or anyone else, as far as that is concerned. Also, I think the question is objectionable on the basis that it [157] contains an assumption which is contrary to the fact, but if you want to ask him that question, although it is highly hypothetical in nature, we will not object to his answering it, if he understands it.

BY THE WITNESS:

A Not in my opinion.

BY MR. FUTTERMAN:

Q Is it your testimony that instead of United Electric obtaining leases for Alcoa, United Electric should be taking leases in the Round Prairie Field?

MR. KEMPF: I do not recall his testifying to that. If you want to ask him a question about it, you certainly may. Is that a question you are asking?

MR. FUTTERMAN: Yes.

MR. KEMPF: Oh. I would like to have the question read. I am sorry.

Q (Read by the Reporter.)

BY THE WITNESS:

A United Electric is taking leases in the Round Prairie Field.

[158] BY MR. FUTTERMAN:

Q Should they be taking more leases in that field, in your opinion?

A I am not qualified to answer that question.

Q Why not.

A I am not a deep miner and this is a deep coal location.

Q How long has United Electric been taking leases in the Round Prairie Field?

A I do not know the exact time.

Q Would it be before 1958?

A I think it was.

Q Is there a difference in the quality or depth of the coal at Round Prairie as against the coal in the Beau-coup Field?

A I do not know, without referring to records.

Q Do you know approximately the depth of the coal in the Round Prairie Field?

A Plus 200.

* * *

[159] MR. FUTTERMAN: If the witness understands the question, I would ask that he [160] answer it.

MR. KEMPF: I would ask the witness to explain the basis on which he is answering the question, then. In other words, I have no objection to the witness answering the question, as long as he—

BY THE WITNESS:

A I would recommend that United Electric continue to take leases mainly west of the Mississippi River.

BY MR. FUTTERMAN:

Q In what areas west of the Mississippi River?

A New Mexico, Arizona, Colorado, Wyoming and North Dakota, if there are any areas available.

Q What about in the state of Illinois? Are there areas where you think United Electric should be taking leases?

A I do not know of any area which would be available in the state of Illinois.

Q What about Schuyler—

A If there is, I would recommend their taking them.

[161] Q What about Schuyler and McDonough Counties?

A I think that we covered those counties fairly well in our previous options and drilling.

Q What about in Tazewell County?

A Possibly in Tazewell County.

MR. KEMPF: I would ask the witness, possibly what? What is your answer?

BY THE WITNESS:

A There is a small coal area in Tazewell County near the Banner mine.

BY MR. FUTTERMAN:

Q Do you believe that United Electric should be taking leases or options in that coal area?

A They should make an effort to, yes.

Q Do you know if they have done so?

A I do not know.

Q What about in the Augusta Field? Should United Electric take some options or leases in that area?

A I think I mentioned yesterday that I thought that we should investigate it, yes.

Q Should United Electric be optioning or leasing more land at Industry?

[162] A To fill in the field, possibly.

Q Do you have any idea how many tons they could pick up in addition to what they already own?

A One or two million tons.

Q Do you feel that the Industry Field may ever be mined?

A Some do, yes, sir.

Q Do you have any idea when?

A No, sir.

Q Would it be in ten years?

A I do not know.

Q Would it be more than twenty years?

A I do not think so.

Q Would it be after United Electric's Fulton County coal reserves run out?

A Possibly, yes, sir.

Q Would it be between ten and fifteen years from the present?

A I could not pin it down that close.

Q Would it be less than twenty, though?

A I think it would, yes.

MR. FUTTERMAN: Counsel, will you stipulate that the Industry Field will be mined [163] within fifteen to twenty years?

MR. KEMPF: No, we will not.

MR. FUTTERMAN: Counsel, will you stipulate that it may be mined within fifteen to twenty years?

MR. KEMPF: No, I will not.

BY MR. FUTTERMAN:

Q Mr. Inman, is the coal seam at Round Prairie the seam currently being mined at Fidelity, as part of the same seam?

A It has the same numeration. I guess it would be—in my opinion it would be called the same seam, yes.

Q Why did UEC take leases and options in the Round Prairie Field?

MR. KEMPF: If he knows.

MR. FUTTERMAN: We do not want you—

MR. CUSACK: Obviously.

MR. FUTTERMAN: We do not want you to answer if you do not know, Mr. Inman.

THE WITNESS: What was the question, please?

MR. FUTTERMAN: Mr. Youker, will you please read the question.

[164] Q (Read by the Reporter.)

BY THE WITNESS:

A I think someone recommended it to our officials, that as long as the Beaucoup Field looked good to Alcoa, "Why not join the group?"

BY MR. FUTTERMAN:

Q Who was this? Who made this recommendation to your officials?

A Either Mr. Hepburn—I believe it was Mr. Hepburn.

Q Did United Electric consult with any other coal producers in regard to the options and leases it took in the Round Prairie Field?

A We sent our drill logs and maps to Freeman Coal Company, to get their opinion of the possible mining technique in this field.

Q When did you do this?

A I don't remember the exact date, but I will say in the early 1960's.

Q Did Freeman suggest any mining techniques that could be used in the Round Prairie Field?

A It was their opinion that the long wall method would not work in this field.

[165] Q Did they have any opinion that they suggested as to what technique would work?

A I do not remember.

Q Is your testimony that you do not remember whether or not they gave an opinion, or you do not remember, if they gave an opinion, what that opinion was?

A I think I stated that their opinion was that the long wall method would not work. They did not advise us what method would work.

Q Did United Electric consult with any other coal producers in connection with the Round Prairie Field?

A I do not know.

Q Mr. Inman, what is a checkerboard acquisition pattern?

A Well, this is in the area of the sectionalized system of land. If you have certain areas, not all of the areas, it appears to be a checkerboard, such as every other section or every third section.

Q Is this a procedure designed to exclude another producer from coming in and acquiring acreages within the field that you are working?

A Could I have that question back, please?

* * *

[171] Mr. Kempf handed the witness Inman Deposition Exhibit No. 2.

(There was a short interruption, after which the taking of the deposition was resumed as follows:)

THE WITNESS: Do you have a question pending?

BY MR. FUTTERMAN:

Q My question is, who did you have in mind as the coal producer which would mine the Round Prairie Field, when you made that statement?

A I did not have anyone in mind.

Q When you wrote that statement did you believe that United Electric would not be able to mine that coal?

A I believe the present and that organization at that time would not have been able to.

MR. FUTTERMAN: Excuse me. Would you read that answer back again, please, Mr. Youker.

A (Read by the Reporter.)

BY MR. FUTTERMAN:

Q What do you mean, when you say "present"?

A Now or then.

[172] Q Oh.

A United Electric.

Q Why?

A There was no one experienced in deep mining.

Q Is it not possible to acquire personnel competent and experienced in deep mining?

MR. KEMPF: May I have the question read, please, Mr. Youker.

Q (Read by the Reporter.)

MR. KEMPF: I object to that question as having been asked this morning and answered by the witness, and on that basis I instruct him not to answer.

MR. FUTTERMAN: Would you answer the question, please.

MR. KEMPF: Let's have the question reread, please, Mr. Youker.

Q (Re-read by the Reporter.)

MR. FUTTERMAN: I am asking this question in regard to the Round Prairie Field.

MR. KEMPF: Well, I think—

MR. FUTTERMAN: The question this morning was not asked in regard to the Round Prairie [173] Field. I believe it is a different question, and I would ask that the witness answer the question.

MR. KEMPF: I am not sure I see any difference, but the witness may answer the question. I want the record to show that I preserve my objection and feel that the question is certainly encompassed by the question you asked this morning.

BY THE WITNESS:

A I am sorry, but I will have to have it back.

MR. FUTTERMAN: Will you read the question please, Mr. Youker.

Q (Re-read by the Reporter.)

BY THE WITNESS:

A I consider "possible" a big word. I am not knowledgeable whether it is possible or not, because we have never tried it.

BY MR. FUTTERMAN:

Q Mr. Inman, if United Electric did hire competent deep coal engineers, supervisors and other personnel that would be necessary for deep mining, in your opinion could United Electric mine [[174] the Round Prairie Field?

MR. KEMPF: May I have that question re-read, please, Mr. Youker.

Q (Read by the Reporter.)

MR. KEMPF: You are limiting this to personnel, I gather.

MR. FUTTERMAN: That is right.

BY THE WITNESS:

A I do not know.

BY MR. FUTTERMAN:

Q Do you think it could not mine the Round Prairie Field if it was able to employ all the necessary personnel for deep mining?

A I do not know.

Q Mr. Inman, in 1963 was there some question in regard to pursuing the Round Prairie Field further, which question was raised by a possible deal with Alcoa?

A I do not know.

Q Was there a proposal or a deal offered by or to Alcoa in 1963, other than the arrangement relating to the Beaucoup Field?

* * *

[179] BY MR. FUTTERMAN:

Q When did you first learn that United [180] Electric was taking leases and options in the Round Prairie Field?

A I do not remember the exact date. It could have been 1958 or 1957, some place in there. My answer was as of today.

Q I am talking about as of 1957 or 1958.

A Well, the board of directors directed that we take the options. I was not in full authority at United Electric.

Q Did you object to taking options in the Round Prairie Field in 1957 or 1958?

A I do not think I was in a position to object.

Q Did you express any opinions to any United Electric officials?

A I am sure I did.

Q Do you recall what those opinions were?

A No, I do not recall what those opinions were.

Q Were you against taking options in the Round Prairie Field?

A Personally?

Q Yes.

A Yes.

[181] Q Why?

A It was deep coal, and I would rather be spending our money on strip coal.

Q Did Mr. Hepburn think that United Electric could mine the Round Prairie Field?

A I do not know what Mr. Hepburn thought.

Q Did you ever have any discussions with him as to whether or not United Electric could mine the Round Prairie Field?

A I do not remember those discussions, if there were any.

Q Did Mr. Utterback think that United Electric could mine the Round Prairie Field?

A I do not know what Mr. Utterback thought.

Q Did you ever have any discussions with Mr. Utterback in regard to whether or not United Electric could mine the Round Prairie Field?

A No, sir.

Q Did Mr. Kolbe think that United Electric could mine the Round Prairie Field?

A I do not know what Mr. Kolbe thought.

* * * *

[188] MR. KEMPF: I think that was asked and answered this morning.

MR. HEDLUND: No, it was not.

MR. KEMPF: All right. I will withdraw my objection.

BY THE WITNESS:

A Prior to my association with United Electric, which was in 1948.

BY MR. FUTTERMAN:

Q Was Ayrshire taking options and leases where they now have the Sun Spot mine at the time you came with United Electric?

A I do not know.

Q Do you know when Ayrshire began to take options and leases in the area where they now have developed their Sun Spot mine?

A No, I do not.

Q Is there any competition between United Electric and Ayrshire for the land in and around the Industry Field?

A In the Industry Field?

Q Yes.

A No.

* * * *

[198] (The prior question was thereupon read by the Reporter.)

MR. FUTTERMAN: He answered that question.

BY THE WITNESS:

A Yes. Then my answer to the second question is the same.

MR. FUTTERMAN: Thank you.

BY MR. FUTTERMAN:

Q Are you familiar with the Kaiparowits Plateau coal deposits?

A I have been there. I have looked at their drill logs.

Q Is that strip or underground coal?

A In my opinion, it is underground coal.

Q Where is that located?

A It is just on the southern Utah border near Page, Colorado—Page, Arizona.

Q Did United Electric investigate these deposits?

A In conjunction with Freeman Coal Company.

Q Did you suggest to Mr. Morris that the Kaiparowits Plateau properties be brought to the attention of Freeman Coal Mining Corporation?

[199] A I do not know that I suggested that to Mr. Morris. I think he was already aware of it, and Freeman Coal Company was aware of it.

Q Did United Electric turn over to Freeman any underground coal possibilities or proper ties that it came across?

MR. KEMPF: What do you mean by "turn over", counsel?

MR. FUTTERMAN: I mean, bring them to the attention of Freeman rather than pursue them for their own benefit.

BY THE WITNESS:

A No, not to my knowledge.

BY MR. FUTTERMAN:

Q Mr. Inman, during your tenure with United Electric, was there a figure in the annual budget for the acquisition of coal reserves?

A In the past few years, yes, sir.

Q What do you mean by "the past few years"?

A Prior to the past few years we did not operate on a strict budget.

Q In other words, are you saying that there was no limit to what United Electric could expend for coal reserves?

* * *

[204] A Well, you had to put into the budget what you expected to spend. If you obtained a [205] lease on a property, you would not spend that amount. Therefore, it usually was under what we put in the budget.

BY MR. FUTTERMAN:

Q Mr. Inman, did you ever recommend that more money be spent for the acquisition of coal reserves than the company had budgeted?

A May I have that question back again?

MR. FUTTERMAN: Read the question, please, Mr. Youker.

Q (Read by the Reporter.)

BY THE WITNESS:

A My experience was that I had an open book on coal reserves.

BY MR. FUTTERMAN:

Q Was this during your entire term of employment with the company?

A Only when I was in control did I have that opportunity.

Q That would be since what date?

A 1964, December.

Q What do you mean by an "open book"?

A If I could come up with a reserve, I could spend the money.

* * *

[218] MR. KEMPF: I have only a few questions, Mr. Inman.

CROSS EXAMINATION

BY MR. KEMPF:

Q In your opinion, will United Electric mine the deep reserves located at its Fidelity mine?

A No. I do not think so.

Q In your opinion, will anyone else mine the deep reserves?

A No. I do not think so.

Q In your opinion, will United Electric mine the reserves located at the King Hill area?

A No.

Q In your opinion, will anyone else mine the reserves at the King Hill area?

A No.

* * *

[222] BY MR. KEMPF:

Q Mr. Inman, since 1960, until the time you left the company, did United Electric fail to acquire any reserves because of the refusal of the board of directors to allocate sufficient funds for this purpose?

A No, sir.

MR. KEMPF: I have no further questions on cross examination.

MR. FUTTERMAN: I have one or two questions on redirect, Mr. Inman.

REDIRECT EXAMINATION

BY MR. FUTTERMAN:

Q Mr. Inman, prior to 1960 did United Electric fail to acquire any coal reserves because of the recalcitrance of the board of directors?

MR. KEMPF: Will you read the question back, please, Mr. Youker.

Q (Read by the Reporter.)

MR. KEMPF: I think "recalcitrance" is a highly subjective word, and I would ask that counsel rephrase his question to give the witness a better idea of what the [223] question is designed to elicit. On that basis, I will object to it.

* * * *

[3]

EXCERPT FROM DEPOSITION OF
JOSEPH TABOR TAKEN NOVEMBER 8, 1968

* * *

JOSEPH C. TABOR,

called as a witness by the platintiff herein, having been by me, the said Claude W. Youker, Jr., as Notary Public aforesaid first duly sworn, was examined upon oral interrogatories and he did thereupon depose and testify as follows:

DIRECT EXAMINATION

BY MR. SIMS:

Q Would you state your name in full for the record.

A Joseph C. Tabor.

Q Where do you live, Mr. Tabor?

A 1304 Ivy Wood Drive.

Q In what city?

A Springfield, Illinois.

Q What is your occupation?

A Chief Clerk, Department of Mines and Minerals.

Q How long have you held this position?

A I have held the position of Chief Clerk since 1953, approximately fifteen years.

* * *

[3]

EXCERPTS FROM DEPOSITION OF
THOMAS J. TARZY, TAKEN NOVEMBER 14-15, 1968

* * * *

THOMAS J. TARZY,

called as a witness on behalf of the Plaintiff herein,
having been first duly sworn, was thereupon examined
and testified as follows:

DIRECT EXAMINATION

BY MR. CUSACK:

Q Please state your full name.

A My name is Thomas J. Tarzy.

Q Your home address.

A 11035 Madison Drive, Sun City, Arizona.

Q What is your telephone number, please?

A Area Code 602-933-2177.

Q What is your present position, Mr. Tarzy?

A My present position is Vice President of Western
Operations.

Q Of what company, sir?

A United Electric Coal Companies.

Q How long have you held that position?

A Since December of 1966.

Q Could you tell us something about your educational
background after high school?

A Yes. I graduated from Stevens Institute [4] of
Technology in 1935 with an M. E. degree, and did a
little postgraduate work in power in plants in operations
and design.

* * * *

[7] MR. HEDLUND: Business, you mean how [8]
much of the coal that was sold was from West Kentucky?

MR. CUSACK: Right; coal they sold, coal they
handled.

BY THE WITNESS:

A They handled any kind of coal that they could make some arrangements with, but primarily it was West Kentucky coal.

BY MR. CUSACK:

Q Were they in underground or in strip mining?

A Well, they represented mines, both strip and deep mined coal.

Q Was this coal steam coal or metallurgical coal or what kind of coal was it?

A Of course, back in those days there was still a substantial market for railroad fuel and so-called domestic fuel, and there was industrial fuel, and of course utility—it was all markets.

Q Did you sell metallurgical coal?

A No, we had no metallurgical coal.

Q When did you leave Southern Coal?

A I left Southern Coal in October of 1952 [9] to go to work for the United Electric Coal Companies as sales manager.

Q Was that about the time Southern was acquired by the Sinclair group?

A Yes, shortly after wards.

Q I see. And who hired you at United Electric?

A John Morris.

Q Had you known Mr. Morris prior to this time?

A Yes, I did, but not as a personal friend.

Q You were living in Chicago at the time that you came with United Electric?

A Yes.

Q And you were manager of operations, Southern's operations up here?

A Correct. I was manager of industrial sales, I wasn't the manager of their entire operations.

Q What were your duties when you first came to United Electric?

A Well, as sales manager, my principal duties at the time were to try to set up a marketing program for the sale of coal that was [10] going to come out of

the Ruby mine, which United Electric had made a sales arrangement with. The mine was not owned by United Electric, but was owned by Ruby, Edwin Ruby and some of his associates in Western Kentucky.

* * *

[15] Q Well, now, we have been discussing some [16] of your duties after your activities with the Ruby mine, and you mentioned efforts to sell the Fulton County coal. Incidentally, you mentioned the problem was dump gasoline?

A Dump gas, natural gas, boiler gas.

Q Is this still a problem in the coal industry now in the Midwest?

A Not as severe, as I understand it. I have to go back to my experience while I was still in the Chicago area up to 1966, but the Chicago utilities particularly had begun to reduce the amount of dump gas that they were burning in the summer months.

Q Do you have an idea how much dump gas Commonwealth Edison Company burned, say, in 1965?

A No.

Q Would you consider it a large percentage of their total energy consumption?

A No.

Q Do you have any idea why there has been a reduction in the use of dump gas by public utilities?

MR. HEDLUND: Well, I think first you had better establish that that is true [17] generally for public utilities, Mr. Cusack, if this witness knows. If you want to direct a question to Commonwealth Edison, which he has testified to, that is all right.

BY MR. CUSACK:

Q Has there been a reduction in the use of dump gas by the public utilities located in Illinois?

MR. HEDLUND: Again, since 1959 are you asking him?

BY MR. CUSACK:

Q From 1959 to 1966 when he was in the Chicago area.

A I would think so because in the '60's there came the movement of the unit train concept of moving coal, which enabled a number of the coal producers to put together some packages with lowered transportation costs, which made them more competitive with the dump gas, and I believe that did encourage most of the utilities to switch to coal rather than adhere to the burning of the dump gas.

MR. CUSACK: Off the record.

[18] (There was discussion off the record, after which the taking of the deposition was resumed, as follows:)

MR. CUSACK: On the record.

BY MR. CUSACK:

Q Have the natural gas people been storing natural gas during the summertime in Illinois?

A Yes, I believe so.

Q Has this somewhat lessened their need, their necessity to dump gas?

A Yes.

Q What else, Mr. Tarzy, was involved in your duties at United Electric during the '50's? First of all, what was your title in the '50's?

A I came in as sales manager in 1952. I think I was appointed general sales manager in 1958.

Q Why don't we start with sales manager. Who did you report to as sales manager?

A Mr. John Morris, who was vice president of sales.

Q And who reported to you when you were sales manager?

A I presume the salesmen that operated— [19] I believe we had one salesman in the Chicago office, and we had several salesmen that worked out of our Peoria office, and I believe we had one salesman in the Twin Cities area. Then we had an office in St. Louis but that was more or less a separate entity during the period that I had first come with the company because it was under the head of vice president, a Mr. Sherrill down there, whose prime responsibility was to look after the sales of the Fidelity Mine in Belleville, and in the

early stages of my career with United Electric I had very little to do with Belleville sales. I did on occasion get involved in it, but it wasn't a prime duty of mine.

Q I understand United Electric had a salesman in Southern Illinois in the DuQuoin area, is that correct?

A Oh, yes. He worked, though, under the jurisdiction of the St. Louis office.

Q Under Mr. Sherrill?

A Yes. He handled our truck sales out of the Fidelity Mine.

Q Did United Electric have any other [20] salesmen that you recall at that time?

A We had a man that worked out of his home in Rockford, Illinois, and in the early days I believe we had a man that worked out of some place in Iowa, but he wasn't with the company for a period much after I got there.

Q Did you have a salesman in Wisconsin?

A No. The salesman who worked out of Rockford did cover the Southern Wisconsin territory for us.

Q Did your Chicago sales office handle Wisconsin business, too?

A Yes.

Q You had a sales office, then, is it correct, in Chicago, Rockford—

A No, not in Rockford.

Q Just a salesman there?

A Yes, who worked out of his home.

Q You had a sales office in Peoria?

A Correct.

Q And St. Louis?

A Correct.

Q And you had a man or salesman covering Iowa?

[21] A Let's see. No, I believe most of Iowa after that one man left was covered out of the Peoria office.

Q Then you had a sales office in St. Louis?

A Correct.

Q Who covered the Twin Cities?

A A man by the name of John Gagnon, and he covered the Twin City area for us.

Q Where did he live, Mr. Tarzy?

A I believe he lived in Faribault. He worked out of his house in Faribault, Minnesota.

Q That is a suburb of St. Paul, isn't it?

A I would have to look at the maps to find out.

Q But it is in Southeastern Minnesota, isn't it?

A Yes. It was accessible by car to Minneapolis, but I really don't know how far it was.

Q Did you have any salesmen in West Kentucky?

A No.

Q Who covered the sales in West Kentucky?

[22] A I did.

Q Out of Chicago?

A Yes.

Q That was in connection with your activities with the Ruby Mine?

A Correct.

Q Was that also in connection with your activities with the Buffalo Creek Mine?

A Yes.

Q What about Indiana? Who covered sales in Indiana, if anyone?

A I think, if there was anything involved in Indiana, I believe that would be handled out of the Chicago office.

Q Now, then, you testified you became general sales manager of United Electric?

A Yes, in 1958, I believe.

Q Was this at Mr. Sherrill's retirement?

A No. Let me see, I think this was occasioned by our hiring a young man by the name of John Dowdle who was made manager of industrial sales, and who worked directly under me.

Q So this was really a title—

A Just a title realignment, you might say.

[23] Q I see. You still continued to report to Mr. Morris?

A Yes, sir.

Q Did you report to anyone else in the company or consult with anyone else in the company, any of the officers?

A Oh, Mr. Kolbe, our President, on occasion would maybe want to know a thing or two when Mr. Morris

was out of town, and he would probably come into my office and ask me about this or that. But primarily, well, my duties were to report to Mr. Morris.

Q How long, Mr. Tarzy, were you general sales manager?

A General sales manager until, well, I remained general sales manager but was promoted to vice president in, I believe, January of 1959. I think the record would probably show that. I continued along with my duties as vice president and general sales manager.

Q Whom did you report to?

A Mr. Morris.

* * *

[29] Q Was that in December of 1966?

A Yes.

Q What areas did these salesmen out of Peoria cover in the period 1960 to 1966?

A I would say they would cover what we would consider the market for Fulton County coals.

Q What would that be?

A Well, Fulton County coals had a rather narrow market area as its natural market, and we used to describe it as possibly within a 50-mile radius of Peoria. But that is very rough, of course.

Q Is that what you mean by natural market?

A Yes.

Q And they called on customers within that 50-mile radius?

A That is right.

Q Do they call on any customers in Iowa?

A Yes.

Q Out of the Peoria office?

A Yes.

[30] Q Did they call on any customers in Southern Wisconsin?

A I do not believe so. I believe that was handled by Darby out of Rockford.

Q And was from the period 1960 to 1966?

A Yes.

Q Do you know whether Mr. Darby is still employed by United Electric?

A Let's see. He was in 1966, but I believe he was on the verge of retirement. I don't know.

Q Do you know who assumed his duties, if he did retire?

A No, I wouldn't know.

Q Directing your attention to the period 1960 to 1966, what was the setup in your St. Louis office?

A This is for what period now?

Q From the period 1960 to 1966.

A The St. Louis office, now we get to the point where we have to check the records to see when Mr. Sherrill retired, and on Mr. Sherrill's retirement we hired a Mr. Robert Croak to run our St. Louis office.

Q Who else was in the St. Louis office?

[31] A Well, in the St. Louis office at that time was Mr. Merkle, who was a salesman that worked out of the St. Louis office, and they had an office man there by the name of Mr. Hargate, and of course a supervisor of the work, a Mr. Blanchard who was our manager that handled the truck sales out of the Fidelity Mine.

Q Did Mr. Blanchard work out of DuQuoin?

A I believe he lived in Tamaroa, Illinois, but worked out of the truck dock at Fidelity Mines.

Q Did he work out of his home or did he have an office?

A He didn't have an office. He must have worked out of his home.

Q Did the St. Louis office from the period of 1960 to 1966 continue to cover the West Kentucky business?

A Well, let's see—

MR. HEDLUND: I am sorry. I am not certain I understand that question, Mr. Cusack. By West Kentucky business, you mean sales to consumers in West Kentucky?

MR. CUSACK: Yes. I believe Mr. Tarzy [32] testified that from the period prior to 1960 the St. Louis office was responsible—

THE WITNESS: For the Fidelity Mine.

BY MR. CUSACK:

Q And some of that coal went to West Kentucky, is that correct?

A No, I didn't say that.

MR. HEDLUND: I didn't think so. You used West Kentucky business before to refer to coal being produced or being sold that was produced by the company or by Ruby in West Tennessee.

BY MR. CUSACK:

Q I see. Who did cover West Kentucky from 1960 to 1966 for United Electric?

A Now we would have to go back to the record and refresh our memory again, but the Ruby Mine ran out of strip reserves somewhere in that period, the late '50's and early '60's, and so did Buffalo Creek Mine, so we just ran out of any coal to sell out of West Kentucky, so there was no sales activity down there.

Q Did United Electric continue to sell coal in West Kentucky?

[33] A Well, I don't know what you mean by that.

Q Did the Fidelity Mine supply any coal for the TVA facilities in West Kentucky?

A Yes. I see what you mean. Yes.

Q Who handled that account?

A I did.

Q All right. Directing your attention then from 1960 to 1966 during which period of time you were vice president of sales, right?

A Yes.

Q Of United Electric, what customers did you call on?

MR. HEDLUND: Are you asking him personally?

MR. CUSACK: Yes, Mr. Tarzy personally as the sales vice president.

BY THE WITNESS:

A You mean in the entire, our entire sales efforts, who did I call on?

BY MR. CUSACK:

Q Yes, sir. I realize that is a long question but if you could tell us, I would appreciate it.

[34] A Shall I tell you the principal ones?

Q Why don't we start with the principal ones?

A Well, since the United Electric's business was primarily aimed at utilities and large industrials, I think it is pretty easy to. I called on, in the '60's, now, I called on Northern States Power in Minneapolis. I called on—

Q Just a moment, sir. Who did you usually call on at Northern States Power? What was the name of the Northern States Power official that you usually called on?

A I believe a Mr. Vince Frawley was the manager of fuel supply.

Q Did United Electric supply Northern States power?

A Yes.

Q What generating stations of Northern States Power did United Electric supply?

A Their river stations.

Q Could you give us the names of those, please, sir?

A Yes. There was Black Dog, St. Paul, [35] Riverside, Redwing, Edison, Winona—there might be a few others, but it was just the river plants that they had located on the Mississippi River.

MR. CUSACK: I think your memory is excellent, but would it be helpful to look at these Coal Buyers in answering some of these questions?

MR. HEDLUND: Mr. Cusack, it seems to me that in this area of where did the coal go, the best evidence of that is the records of the company, presuming, of course, that they still exist, and I would assume that they do. I think if you continue this with every customer he called on, we may be taking a lot of time unnecessarily.

MR. CUSACK: Well, I realize that, but the difficulty, of course, is that we do not have this information as yet. We realize that you have promised you would submit it to us.

MR. HEDLUND: You will have it, Mr. Cusack, yes.

MR. CUSACK: Our problem here is that [36] we haven't received it yet, and I am confident it will be forthcoming eventually, but I just thought we would go through this very shortly.

MR. HEDLUND: O. K., if we can do that. I just think we may be taking up time unnecessarily to go through a lot of details.

MR. CUSACK: I understand, but Mr. Tarzy was the sales vice president, and we don't want to have to bother to bring him back to explain any of the materials perhaps that were sent, and I thought he might be able to give us this on really a shorthand basis which may be helpful to both parties.

MR. HEDLUND: I think with respect to Northern States, he said the river stations, and there may be ten of them.

MR. CUSACK: Right. Sure.

BY MR. CUSACK:

Q Would it be helpful, Mr. Tarzy, in answering some of these questions, to look at the Keystone Coal Buyers Directory of Public Utility Plants?

MR. HEDLUND: I suppose that would [37] depend on the question asked.

BY THE WITNESS:

A Not Particularly.

BY MR. CUSACK:

Q All right, fine. Your memory on this is pretty good, isn't it?

A I hope it is, but it has been about two years, and it is surprising how much you can forget in two years particularly when I am working on an entirely different type of project out there.

Q Mining coal in the mountains, right?

A That is right, and plateaus.

Q Actually I would rather get to that first, because it is more interesting in a way.

Mr. Tarzy, the coal that United Electric sold to Northern Power during the time you were vice president in charge of sales, where was this coal from?

A Fidelity Mine from the Belleville district.

Q All of it?

A Well, our contract called for the coal to be shipped out of the Fidelity Mine.

Q Did you ever substitute any Fulton [38] County coal?

A On very rare occasions. It would strictly have to be an emergency proposition.

Q Did you ever use Freeman coal to supply these contracts?

A No, I do not believe so.

Q Who else did you call on, other than Northern States Power?

A Let's see. I called on Interstate Power Company at Dubuque, Iowa.

Q Who did you call on at Interstate Power?

A Mr. Don Carlson.

Q Was he vice president in charge of fuel purchasing?

A I can't remember his exact title.

Q Did United Electric supply coal to Interstate Power?

A Yes, sir.

Q For what plants, sir?

A The Lansing plant.

Q Was that located in Iowa?

A Yes, Lansing, Iowa.

Q Is that on the river?

A Yes.

[39] Q The Mississippi River?

A Yes.

Q Any other plants?

A I think we shipped some minor quantities of coal to their Beaver Channel plant which was located near Dubuque.

Q Was that a river plant?

A Yes.

Q Any other plants?

A They had one other plant, I can't remember the name at the moment, but we shipped a very small quantity of coal there. The primary or the bulk of our shipments went to the Lansing, Iowa plant.

Q Where did this coal come from?

A It came from the Fidelity mine.

Q Is this barge coal?

A Yes.

Q Incidentally, the coal that went to the Lansing plant of Interstate Power and to the river plants of Northern

States Power from the Fidelity Mine, how did this get on the river from the Fidelity Mine?

A Well, originally we shipped the coal by [40] rail from the Fidelity Mine to the Ford dock of the Missouri Pacific Railroad, and the latter stages of my stay in Chicago, we had made arrangements to ship this river coal to the Kellogg dock.

Q Is that located on the Illinois River?

A Yes, it is.

Q On what rail line did the coal move from the Fidelity Mine to the Ford dock?

A Missouri Pacific Railroad.

Q What rail line did the coal move from the Fidelity Mine to the Kellogg dock?

A Missouri Pacific Railroad.

Q The same line?

A Yes.

Q The same rail line?

A The same railroad. Now if you were going to get into divisions, different divisions of different railroads—it was the same railroad.

Q But moved on different tracks?

A Well, I think it would have to because it was two different locations. But the divisions, I really don't know.

Q I understand. I am just trying to [41] determine whether or not it was the same rail tracks.

A Well, I recall something about coming off a different division. You know how these railroads are. This might be the Kellogg Division and the other might be the Ford Division, but it was the same railroad company.

Q Why did you transfer your business from the Ford dock to the Kellogg dock?

A Because we could make a lower transportation cost.

Q Who else did you call on other than Interstate Power and Northern Power?

A The Dairyland Power Cooperative located at La Crosse, Wisconsin.

Q Was that a river plant?

A Yes.

Q And where did this coal—

A No, that was their general offices. Their plants were located upstream from there or downstream from there. They had several plants.

Q Two or three?

A Yes.

[42] Q Where did this coal come from?

A From the Fidelity Mine.

Q Who did you call on at Dairyland Power Cooperative?

A Mr. Norm Moser and a Mr. John Madgett.

Q And who else did you call on then?

A You are talking about now generally?

Q From 1960 to '66.

A Let's see. I called on the Union Electric Company.

Q Is that headquartered in St. Louis?

A It is headquartered in St. Louis, and I called on a Mr. Mark Covell and a Mr. Stricklin.

Q Did United Electric supply coal to the plants of Union Electric?

A Yes.

Q Which plants, sir?

A Primarily the Merrimac plant which was located on the river.

Q The Mississippi River?

A Yes.

Q That was north of St. Louis?

A South of St. Louis.

Q And what other plants?

[43] A Well, we did have some occasional shipments, they had some plants on the east side of the river which were rail shipments, but we were primarily interested in the barge movement of coal, and I would say to all intents and purposes most of our coal went to the Merrimac plant.

Q Where did this coal come from?

A From the Fidelity Mine.

Q Who else did you call on? You said you called on TVA. Perhaps we could do that one now.

A Oh, yes. I called on a Mr. E. C. Hill at TVA. I think he was—

Q In charge of fuel procurement?

A Yes, in charge of fuel procurement.

Q And this was in Chattanooga?

A Yes, Chattanooga, Tennessee.

Q What plants of TVA did United Eelectric supply?

A Well, as I mentioned previously we sold the coal to them f.o.b. mine, and they shipped the coal to whatever locations they could reach from the mine.

Q Did you have any knowledge of where they did ship it to?

[44] A I think I testified previously that it could move to the Shawnee plant, the Johnsonville plant, and the Colbert plant.

Q In fact, United Electric did supply coal to the Shawnee plant, did it not?

A Yes.

Q And to the Colbert plant?

A It was hard for us to know where the coal was going to wind up after they took possession of it at the mine and they would give us shipping instructions as to which plant to ship it. It could apparently start out with a shipment, say, to Shawnee, and then be diverted somewhere else at their discretion because they owned the coal f.o.b. mine in the car.

Q But you do know that United Electric did supply an awful lot of coal to the Shawnee plant, is that correct?

A I don't know what you mean by an awful lot, but I think whatever we shipped there that we had under contract with them, I would say, and I am stretching my memory again, I would say most of it went to the Shawnee plant.

Q Do you know of any other plants that [45] United Electric coal went to, which plants were operated by TVA?

A No.

Q Who else did you call on?

A Let's see. I called on Wisconsin Power and Light.

Q Where are they headquartered?

A Their headquarters are in Madison, Wisconsin.

Q What plants did United Electric supply there?

A We supplied their Nelson Dewey plant located at Cassville, Wisconsin, on the Mississippi River.

Q Any other plants?

A I believe that was their only plant on the Mississippi River, but we also, back in the old Ruby days, did ship them some of the Ruby coal to their Blackhawk plant located in Southern Wisconsin.

Q Who did you call on at this utility?

A Well, when I originally called on them, it was a Mr. Everett Chandler who was their purchasing agent, and after he retired, I called [46] on a Mr. Hodgson and a Mr. Abrahamson.

Q Where did the coal come from that was supplied to this utility?

A From our Fidelity Mine, in the case of the Nelson Dewey plant. Back in, of course, in the '50's, when we had the Ruby Mine, why, the coal for the Southern Wisconsin plants came out of the Ruby Mine.

Q Did any of the mines at Fulton or Peoria supply any of the coal requirements of this utility?

MR. HEDLUND: Talking about the Wisconsin Power and Light?

MR. CUSACK: Yes.

BY THE WITNESS:

A I think in an emergency case, at one time I think we did ship some Banner coal up there. But you would have to check the records on that. I recall at one time in our efforts to try to help the utility in getting some reductions in rail freight rates that we utilized the all-water capabilities of the Banner Mine to show the railroads that transportation costs could be lowered by using other methods of transportation. But that was strictly, I would say, an emergency [47] movement or, you might say, a trial movement.

.

[76] Q Where is that located?

A It is located near Danville, Illinois.

Q Are there any other plants of Illinois Power that United Electric supplied coal to?

A They did have a plant at Wood River, Illinois, to which we made an occasional shipment, but it was very occasional.

Q Did Freeman supply coal to the Wood River plant of Illinois Power?

A Well, I believe the Wood River plant at the time I was there was supplied by most of the southern Illinois producers, and I would presume that Freeman did ship them some coal. I am quite sure they did, because all of the Southern Illinois producers, I believe, did ship them some coal.

Q Was that rail transportation?

A Yes.

Q Directing your attention from the period 1960 to 1966, did you sell any coal to Freeman Coal Mining Corporation?

A Yes.

Q Who handled these sales for United Electric?

[77] A I presume I would handle some of them, and possibly Ed Butler would handle some, and I believe that would be about it. There might be some occasions where maybe the shipping clerks might have gotten involved, but primarily—is that what you are looking for?

Q Yes; sure.

A (Continuing) It would be natural for them to come to the sales department to try to buy some coal.

Q Who did you call on at Freeman?

A Let's see. Most of my contacts there in connection with the buying and selling of coal would depend on what account would be involved. In some cases it might be, maybe, Mr. Gebhart or Mr. Riley or possibly, in Mr. Butler's case, maybe possibly Mr. Riley again, who I think was their general sales manager at the time. I think he retired prior to my leaving, though.

Q And this coal that United Electric sold to Freeman, do you know what facilities of Freeman it went to, or what customers of Freeman it went to?

A I would have to check the record on [78] that.

Q Do you have any recollection of where it would go?

A Well, let's see. Oh, I would say possibly the one thing that would have been involved was probably the

TVA business. The records would show, and I think possibly that might have been the biggest piece of business that might have been involved between us, at least that is my recollection.

Q Was TVA used to backstop United Electric sales to TVA, or was United Electric used to backstop Freeman sales to TVA?

MR. HEDLUND: I don't understand the question, Mr. Cusack, in the terms of backstop.

BY MR. CUSACK:

Q Do you understand what the term is?

A No. Would you repeat that?

MR. HEDLUND: Are you asking him whose contract the coal was shipped on?

MR. CUSACK: Right. Whose contract was the coal shipped on, the United Electric coal shipped through Freeman or sold through [79] Freeman?

BY THE WITNESS:

A I think I know what you mean now. Freeman did have a contract with TVA, and they allowed us to ship some coal on their contract or made arrangements for us to ship some coal on their contract.

BY MR. CUSACK:

Q In other words, you got a part of the Freeman business?

A Well, I—

MR. HEDLUND: I am going to object to that characterization. I don't understand what you mean by that characterization, and therefore I object to it.

BY MR. CUSACK:

Q What plant of TVA did Freeman supply on this contract which United Electric shared?

A Well, most of the coal shipped out of Illinois would go to the Shawnee plant.

Q So this would be involved in the Shawnee plant?

A That is correct.

Q But United Electric also had a [80] contract with TVA to supply coal to Shawnee?

A Now you have to go back to the original thing that I talked about. When we first had the Ruby Mine back in the '50's—what period are you talking about now?

Q 1960 to 1966.

A 1960 to 1966, I think in the early '60's we were just about phasing out the Ruby Mine and the Buffalo Creek Mine, and we had our own contracts and we shipped our own coal. After the mines phased out, I don't believe we ever took another direct contract from TVA. That is, United Electric.

Q Right. But you did sell coal via Freeman, is that a fair statement?

MR. HEDLUND: If you said delivered or shipped?

BY MR. CUSACK:

Q Shipped coal.

A We shipped coal at Freeman's request—or not request. Let me say this. Do you want me to put it in my own words?

Q Certainly, please.

A When we needed help, when United Electric [81] needed some help to get rid of some of their so-called left-over production or coal that we produced that was kind of odd sizes and sizes that couldn't move anywhere else, we would ask Freeman's help to let us ship it on their TVA contract, and whenever they could do that for us and could help us, they would.

Q All right. Now, we have already talked about the Wisconsin Power and Light Company, Interstate Power Company. Did you call on Corn Products Company?

A I did call on them once or twice, but that account was primarily handled by Mr. Ed Butler.

Q I see, and where was this coal shipped to from United Electric mines?

A It was shipped from the Cuba Mine in Fulton County to the Corn Products plant at Pekin, Illinois.

Q Was this by rail?

A Yes.

Q Did you ever call on anyone at Linde Company, a subsidiary of Union Carbide Corporation?

A Yes.

[82] Q Who did you call on there?

A I can't remember his name, now.

Q Where did United Electric ship the coal; to what facility of Linde did United Electric ship the coal?

A I remember his name now. His name is Howard Kessler.

Q To what plant of Linde did United Electric ship the coal?

A Their East Chicago plant, East Chicago, Indiana.

Q Was this a generating station or was this a processing plant?

A I believe they did generate some of their own power.

Q Where did the coal come from?

A From the Banner mine, and on some occasions we had shipped them some Buckheart coal.

Q By rail or barge?

A Via barge.

Q The Banner coal would come up by barge from Fulton County?

A Correct.

Q How would it get to East Chicago?

[83] A It would be taken out from South Chicago and hauled across the opening into Indiana Harbor. Do you understand how that works?

Q No, sir.

A The river, the South Fork of the Illinois River does not directly connect with Indiana Harbor, so in order to get to Indiana Harbor, you have to go out into the lake, and then try to come down just a very short distance of the lake, and back into the little canal in Indiana Harbor.

Q Did it go up solely by barge?

A Oh, yes.

Q You didn't have to transfer?

A No, it was in the same barge.

Q Do you know who else supplied coal for the East Chicago plant of Linde?

A No, I don't.

Q Do you know whether Freeman supplied any coal for that facility?

A I don't believe so.

Q Did you sell any coal to Illinois Coal and Docks Corporation?

A Yes.

Q What is the Illinois Coal and Docks [84] Corporation, do you know?

A Well, you are getting into an area there that I am not too familiar with, because Illinois Coal and Docks was, as I recall it, primarily concerned with the Central Illinois Light Company business, and as I previously said, that was handled primarily by Mr. Morris.

Q I see. Well, is it fair to say that Illinois Coal and Docks Corporation supplied the Peoria plants of Central Illinois?

A I believe they did.

Q All right. And what mine was served by United Electric? What mine of United Electric served the Peoria plant of Central Illinois?

A The Cuba mine, primarily.

Q And that was rail coal also?

A Yes.

Q Did United Electric from 1960 to 1966 sell any coal to the Crerar-Clinch Coal Company?

A Yes.

Q Who did you call on there?

A That account was handled—that account wasn't handled by me personally. It was handled by Mr. Butler and Mr. Gilhaus. I did make an [85] occasional call in there, and the fellow I talked to was—I just can't remember his name now. It was a small account and it is kind of hard to remember those names.

Q I understand. What kind of coal, or what does Crerar-Clinch use this coal for?

A Crerar-Clinch was what we classified as a retail coal company in the Chicago area, and they did have a retail coal dock that was equipped to handle barge coal.

Q Would this be where United Electric would deliver its coal?

A We would sell them the coal in a barge normally that they would supply to us. In other words, they made arrangements for their own barging. So it was just like selling somebody coal f.o.b. car or f.o.b. barge.

Q Where would this coal come from?

A It would come from Fulton County. In the case of Crerar-Clinch, since it was a retail coal company, that probably was Banner coal because Banner coal was the type that would probably apply to this kind of business.

Q The higher quality coal?

[86] A That is right.

Q But it would move by barge from the Banner Mine?

A It would have to. Well, you know the situation at the Banner Mine, it is located right on the river and it does not have any rail facilities.

Q Yes, I understand. Isn't it a fact that the Banner Mine is the only mine in the country that is located right on the river?

A I think we used that in our original advertising, but I think we can find that because it is kind of hard to know what everybody in the country is doing. But in checking our records and trying to set up our advertising program, we did claim that it was the only mine in the midwestern area that is so located.

Q Do you know of any other mine in the midwest that does have or that is located directly on the river?

A No.

Q In fact, isn't the Banner mine processing plant located on the river and the tipple is on the river, isn't it?

[87] A Exactly.

Q So it loads directly on a barge?

A The coal goes from the preparation plant into three storage silos, and from there, when the barges are available, they are unloaded from the side over a belt into the barges.

Q And the Banner Mine is a fairly unique mine by having these facilities, is that fair to say?

A Yes. By unique, you mean there aren't too many like that. It is not an ordinary type of mine.

Q Right. Do you know of any other mine in the Midwest that does have these facilities?

A There are some that approximate these facilities. You go down into Western Kentucky, for instance, the Uniontown Mine of the Island Creek Coal Company, which used to be the West Kentucky Coal Company, they used a conveyor belt that might be several miles long to load the coal from their preparation plant into barges.

It is a relative thing. The DeKoven Mine of the Pittsburgh Midway Coal Company was a [88] river loading mine down there in West Kentucky, but they had to use a belt possibly several miles long to get into the barge. Do you get my point? So we were unique in the point that we had just a short belt loading facility into the barge. But other people could do it.

Q But it would be a longer distance.

A It would be a longer belt haul to the river, but the fundamental idea of barge loading has been used for years.

Q Yes. You used it at Liverpool.

A That is another good example, except in that case, instead of a belt, we use the Buckheart Railroad. You see?

Q I see.

A So the idea is not unique, if that is what you meant by that word. The idea is as old as the hills.

Q No, I was saying isn't the Banner Mine unique in the fact that it is the only mine with a processing plant on the river and goes immediately to barge transportation.

A In that case, that is correct.

Q And this makes it a highly profitable [89] mine, does it not?

A Well, let's see. What do you mean by highly profitable? You would have to refer to something else. We did have some years while I was there at the Banner Mine where we ran into some kind of bad operating conditions and we didn't consider it a very profitable mine. But I would say when things were going right, production was right, and we had the coal sold at the right price and everything was going, you know, along smoothly, the very fact that we were located right on the river and had no transportation costs to get to the river would make it a potentially profitable mine.

Q Has United Electric's Banner Mine overall been profitable?

A The Banner Mine?

Q Yes, sir.

MR. HEDLUND: I don't understand what you mean by overall.

BY MR. CUSACK:

Q Well, I believe the testimony was that the Banner Mine was started in 1960, is that correct, Mr. Tarzy?

[90] A Around that time, yes.

Q And from the period of 1960 to the present time, if he knows, or at least from the period 1960 to 1966, when he was headquartered in Chicago in charge of sales, does Mr. Tarzy know whether or not the Banner Mine was profitable?

A Oh, it made a profit every year.

Q Can you tell us what the profit was on a per ton basis?

A No.

Q Do you have any idea?

A No. It varied.

Q Would it be over a dollar a ton?

A Now, if you are talking about a period of a month or something like that?

Q No. Let's do it for the year 1965. Do you know whether or not the Banner Mine in the year 1965 had a profit of a dollar a ton?

A I couldn't tell you. I think the records would show that. I wasn't the financial man in the company and my job was to try to sell the coal at the highest possible realization that we possibly could, and it was up to the production department to produce it at as low a cost as they [91] could, and the difference was a profit.

Q And you were both successful in this endeavor, weren't you?

A I hope so. We felt as the sales department that we were at least doing our part of the job. So, I mean, you would have to ask somebody that knew the whole story to answer your question properly.

Q I understand. Mr. Tarzy, did you also call on the Commonwealth Edison Company?

A Yes, I did.

Q Who did you call on there?

A There were several people. The first one I probably called on was Mr. John Brownlee. The second one was—

Q Glen Beaman?

A Beaman was the principal one. I could go back. They had several fuel agents, as they call them, you know, over the years, but it finally resolved during the period that I had anything to do with it to Mr. Glen Beaman, and he had an assistant by the name of Mr. Norm Wandtke, I believe it was, that I called on.

Q Was United Electric successful in [92] supplying Commonwealth Edison with coal?

MR. HEDLUND: May I have the question read, please?

Q (Read by the reporter.)

MR. HEDLUND: I don't understand the question. You are asking did they sell coal to Edison?

THE WITNESS: I think that is what he means.

MR. CUSACK: Yes.

BY THE WITNESS:

A This matter of success is a relative thing, you know. Sometimes I would go into my boss and say, well, gee whiz, we did a pretty good job, and he thought it was a successful job. I would go in maybe six months later and I would say we didn't get this particular job, we weren't successful, and of course, he would say what have you done lately, you know, that sort of thing. So this matter of success is a relative thing.

BY MR. CUSACK:

Q But United Electric did and does sell Commonwealth Edison coal, do they not?

[93] A At the time I was there they did. We were shipping Commonwealth Edison coal.

Q Up to December, 1966?

A Right.

Q Could you tell us the generating stations of Commonwealth Edison which United Electric supplied?

A Their river stations.

Q Could you give us the names of those, if you recall, please?

A Well, let's see. Will County, Ridgeland, Fiske, Calumet and Northwest. I believe those latter two stations are phasing out so that they are minor items, or they were at the time I was there.

Q Do you ship any coal to the Joliet station of Commonwealth Edison, or is this the same as the Will County station?

A No. Will County and Joliet stations are separate stations. Now what period are you talking about?

Q 1960 to 1966.

A Yes. Prior to the time that they put in a unit train facility at Joliet, yes, we did [94] ship coal by barge to the Joliet station, the old Joliet station.

Q Did you lose that business to Southwestern Illinois?

A We lost it to unit train business.

Q From the Captain mine?

A Let me add this. When you say lost business, because of Commonwealth Edison's versatility in receiving barge coal, the coal that I would assume we would have normally shipped to the Joliet station by barge maybe wound up at Will County, Ridgeland or some place else.

Q Directing your attention to 1966, what stations of the Commonwealth Edison did United Electric ship some coal to?

A In 1966? I would say Will County Ridgeland and Fisk.

Q Where is the Will County station located?

A It is in Will County on the Illinois River.

Q And the Ridgeland Station is located in Chicago?

A In Chicago.

[95] Q On the Sanitary Ship Canal?

A Well, we used it—we used to call it all the Illinois River.

Q But on the water?

A Yes, on the Illinois Waterway. That is a good way to put it.

Q Where is the Fisk station located?

A That is in Chicago also on the Illinois Waterway.

Q Mr. Tarzy, do you know whether Freeman supplied coal to the Fisk station of Commonwealth Edison Company in 1966?

A No, I wouldn't know.

Q Do you know whether they supplied any coal to the Ridgeland station?

A No, I wouldn't know. If you are driving at whether I knew they shipped some coal that was supplied to some river stations of Commonwealth Edison, is that what you are driving at?

Q Yes, sir. They did ship to river stations, then?

A Yes, that is right.

Q Has United Electric over the period of [96] years that you were at United Electric located here in Chicago, has it at one time or another supplied all of the river stations of the Commonwealth Edison Company?

A That is a tough question. I just got knowledgeable about the Commonwealth Edison Company in recent years, you know, since the time that I began to handle the account.

Q Let me put it this way: Other than the Joliet stations?

A Yes.

Q The Will County station, the Ridgeland station, and the Fisk station, does Commonwealth Edison Company have any other generating plants located on the Illinois Waterway?

A I mentioned Calumet and Northwest.

Q Oh, right. Has United Electric shipped to Calumet?

A Yes.

Q And to Northwest?

A Yes.

Q To Will County?

A Right.

Q To Joliet?

[97] A Yes, sir. That is prior to the unit train.

Q Right. And to Fisk?

A Right.

Q And to Ridgeland?

A Right.

Q And you also testified that you know that Freeman also supplied the Illinois Waterway generating stations of Commonwealth Edison Company?

A Some of them. I don't know which ones.

Q I understand. Mr. Tarzy, were you responsible for United Electric entering into a large contract with Commonwealth Edison Company to supply Commonwealth Edison Company with coal?

A You are talking about the last contract we had made with them?

Q Yes.

A Yes, sir.

Q When was that contract entered into?

A We negotiated the contract, well, actually, it was a renegotiation of an existing contract, and we renegotiated it during June of 1962, to be effective on January 1st, 1964.

* * * *

[108] It looked like we were going down a dead end. It did seem to us that eventually we would have to get some deep mine coal somewhere. I mean, if you wanted to stay in the coal business, you had to get coal, and if there wasn't any strip coal available, you would have to get deep mined coal. To us, or it seemed to me, that this kind of an association we had with Freeman Coal Mining, who were already established in the deep coal mining business, it seemed to be kind of a fortunate thing to have happen to us. Either that or else we would have had to associate with somebody else that knew how to mine deep coal or else, failing that, try to get into the deep coal mining business ourselves.

But that, you know, is a pretty tough business unless you know what you are doing.

Q Based on what you take to be and to have been the condition of United Electric, that is, the condition of its personnel, the condition of its sales, the cash flow of the company, the profitability of the company, the customers of the company, the future demand for coal, do you [109] believe that United Electric by itself would be able to go into underground mining?

MR. HEDLUND: Have you finished your question?

MR. CUSACK: Yes.

MR. HEDLUND: It is a very long question. I would like to hear it read.

Q (Read by the reporter.)

MR. HEDLUND: I think that is a very involved and long question, Mr. Cusack. I think it is a very difficult one to understand completely in order to answer it. I would like to see you rephrase it, but I won't object to it if the witness understands the question.

BY MR. CUSACK:

Q Do you understand the question? Let me give you the basis for my question.

A Didn't I answer it previously, though? Well, go ahead, ask your question.

Q Assuming United Electric had the profitability and the cash flow that it has at the present time, assuming that it—

A Don't say at the present time. Say when [110] I knew something about it, back in 1966.

Q All right. Let's take the question back to 1966. Assuming the profitability of United Electric as of 1966, that is the cash flow, depreciation, depletion, net profitability, assuming the sales of United Electric—

A Yes.

Q —assuming the personnel of United Electric or the personnel available to United Electric, assuming that the demands for coal remain at least as great as it was in 1966—

A Yes, That is an assumption.

Q —do you believe that United Electric by itself could go into the underground mining business?

A Well, you are asking for an opinion there. You mean I can hazard a guess?

Q Yes, sir.

A We were strictly a strip mining company. I mean, that is obvious. We have been in the strip mining business I don't know how many years, 30 or 40 years. To my knowledge we didn't have anyone in our organization that was familiar with the deep mining practices

and was even assigned [111] that kind of a project. You would just have to start from scratch.

Q I understand, but you—

A And to start from scratch to build a deep mining organization, I would say would probably be—I wouldn't say it would be impossible, but it would be probably one of the toughest jobs anybody could try to take on. You see, the strip people, as we were, are just naturally afraid of underground coal. I mean, this is a natural instinct.

Q There is a certain antagonism between the two schools of thought?

A Not antagonism. We are afraid. If you told me, if I were vice president in charge of sales and you told me that starting tomorrow you can't do what you are doing, we are going to send you down to train to be superintendent for an underground mine, I would say, "Uh-uh, I am on my way. Just get another boy."

I mean it is a, well, deep mining from the standpoint of a stripper is a hazardous business. You have got to know what you are doing. You have got to be knowledgeable and I [112] would say from my—well, I couldn't do it. Mr. Morris couldn't do it.

Q But you were a salesman anyway, weren't you?

A Yes, but I am an engineer originally by training.

Q But that is in regard to the boiler end of the business, the engineering end of the business, isn't that right?

A When I was with Southern Coal Company, I was assigned in some technical aspects to go down to the deep mines to help them out with their preparation problems. I was associated with deep mines, and every once in a while I had to go down into the mines just to see why the coal was coming out maybe in poor quality out of the preparation, maybe the fellow down in the mine was digging, say, in the floor of the mine and he was taking too much of the mud, so to speak. So I knew enough about it. But I just couldn't wait, every time I went down into a deep mine, I couldn't wait to get out of it.

So I am familiar with the problems that they do have in a deep mine and it is [113] specialized. Strip mining

to us is an easy occupation as compared with deep mining. It takes specialized knowledge and experience to do it. We didn't—as far as I was concerned and the people that I knew in United Electric, we weren't prepared.

Q Well, do you think that United Electric would be able to acquire competent personnel to supply the technological knowledge to go underground by itself?

A That would be tough. Money talks, you know. I don't know what your present job is now, but if somebody came along and offered you \$25,000 a year more to go to work for somebody else, would that tempt you?

Q Yes.

A All right. Then in my case it is the same way and the same case with mining personnel. Good mining people are hard to get because of the nature of the business. It is a specialized profession.

. . . .

[119] BY THE WITNESS:

A It is kind of—I think I know what you are driving at.

BY MR. CUSACK:

Q I mean, you are going to have to tell me the variables. I am not going to give a hypothetical and say based on the opening of a new coal base, but what in your opinion—

A I understand. As of 1966, before I was transferred out west, this is the way we looked at the picture. Our Cuba Mine was facing extinction in a matter of just a few years.

Q What would that be, five years?

A Well, I think at the time there was a question—at the time I left there was a question of picking up some acreage, but anyway, it was adjacent to the Cuba Mine, and it was a variable piece of acreage, and if they could

have [120] picked that up, and I hope they have been able to, they could have extended the life of the mine maybe—and I am getting at figures again, but this is what you want, some kind of approximation?

Q Yes.

A I would say maybe six years or something like that. Failing to get that, I think it was a matter of two or three years before the Cuba Mine was going to be dead. So then from the standpoint of sales, and this is what my concern was, how are we going to take care of the customers that we were shipping Cuba coal to.

Well, then we thought, well, we do have some. The Buckheart reserves are larger than the Cuba reserves, not much larger, but say they had maybe ten years to go or something like that, so we will try to arrange our preparation plan and take care of our Cuba customers out of the Buckheart plant.

All that would do, of course, is to make Buckheart go out faster, you see. If that took Buckheart coal then to go on the rail business, we would have to try to back Banner in to take care of our river accounts, so we were [121] getting ourselves in an ever tightening circle. By manipulation, taking care of certain customers this way or that way, maybe we might have lasted, I don't know, in Fulton County—I am still guessing, right?

Q Yes.

A —maybe five years, ten years at the outside, maybe. Does this answer your question?

Q What about the Fidelity Mine now?

A Well, the Fidelity Mine, and this is all recollection again, their reserves were fairly similar in size, I think, to the Buckheart reserves, and I would say the same situation would apply there, although we didn't have the flexibility there that we had in Fulton County.

In Fulton County we had three mines to kind of juggle back and forth. If we couldn't take care of them out of Cuba, say this week the Cuba Mine was down, you could take care of the coal out of Buckheart or on the river, Banner. But in Belleville where we only had the one mine, it was that mine, and when that mine was petered out, we are done.

[127] So we considered since we had, well, at that time, we had the Commonwealth Edison [128] contract, we had a good backlog of river business, and if we could make the economics work out, try to get the Industry coal down to the river, put it in barges and substitute it on our Buckheart or Banner contracts. I mean it is a natural.

Well, failing to get coal down closer to the river where you didn't have to build a railroad or a conveyor or whatnot for 20 miles, a minimum of 20 miles, you couldn't get competitive transportation-wise.

Q You know that the Sun Spot Mine of Ayrshire is at Vermont, isn't it?

A I know where it is.

Q Have you ever visited that mine?

A Yes, I have.

Q You also know, do you not, that the Ayrshire plant at Vermont loads coal onto the CB&Q?

A Right.

Q Which is taken down here to Frederick?

A Right.

Q Which is right north of Beardstown and then loaded on barges, right?

A Correct.

[129] Q And that dock is contiguous to the river, is it not?

A Right. That is correct.

Q Now, who owns that dock?

A I think Ayrshire owns the dock.

Q But isn't it a fact that the CB&Q does run along the dock there?

A Oh, yes.

Q For some miles?

A Oh, yes.

Q As a matter of fact, there is a grain loading facility just north of the Frederick dock there, isn't there?

A Right. That is correct. I don't know about the grain loading facility. All I know is that the CB&Q runs from the Sun Spot Mine to a dock on the river. I think it is near Frederick.

Q Right. Now, do you think that the United Electric could tie in the Industry Field with the CB&Q, and then go on the CB&Q to the river?

A Oh, I imagine physically it could be done, but the cost would be prohibitive.

Oh, you mean coming up the other way? Who would build the ten miles of railroad?

[130] Q From Industry to the CB&Q?

A Yes.

Q I don't know.

A My God, the CB&Q wouldn't build a railroad for anybody for ten miles for twelve million tons of reserves. You just couldn't afford to do it. Unless you sneak up on them.

Q How much would it cost to build the rail line from Industry to the CB&Q for ten miles, assuming it is ten miles?

MR. HEDLUND: If you know.

BY THE WITNESS:

A I don't know.

BY MR. CUSACK:

Q How much tonnage would you need to ship over this rail line to interest the CB&Q in putting a spur in to the Industry Field?

MR. HEDLUND: Can a ten mile piece of track be referred to as a spur? I just wonder. I am not an expert in railroads, but it seems to me that is a long spur.

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[135] Q Would there be a possibility of the coal at Industry Field being trucked to the junction or to the rail line of the CB&Q?

A I don't think it would be done economically.

Q How far do you truck coal at the Buckheart Mine to the processing plant?

A I wouldn't know. Back in 1966, I think our haul was something around four or five miles.

Q What is the furthest they have hauled coal at Buckheart to the processing plant?

A That I don't know.

Q Do you know how far they trucked coal from where the coal seam is located to the processing plant at Fidelity?

A I think that situation was similar to Buckheart, but I wouldn't know the exact figure.

Q Isn't it a fact that they do truck coal about six or seven miles down to Fidelity?

A Oh, I don't know.

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[142] I think at the time we originally looked at it, just from the figures that I saw at that time, they were well in excess of four dollars, and I said if that is what it is going to cost to produce the coal, I don't see what piece of business we are going to be able to put it on, and unless we can get an awfully low transportation cost, which didn't seem to be feasible with an isolated coal field sitting out there ten miles from the railroad and possibly 20 miles from the river.

All right, that is one way. First you get the production cost figures and what your costs are going to be when you are trying to determine the profitability of a coal mine. Now, that is the production department's duties. Our duties in the sales department, and sometimes this works in reverse: What could you get for this coal if we supplied you with a raw coal that would run, say, so many BTU's or a washed coal at so many BTU's? What could you return, what realization could you get for that coal for us?

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[170] Q Yes.

A So I mean, it is not an unusual practice. Now, the thing you are talking about is a whole number of suppliers to one station. That used to be common practice, well, maybe ten years ago, maybe as late as five years ago, but in any event in my experience in sales with United Electric that has been the trend: Big units, big volume, get the lowest transportation costs, get the lowest coal price, and get all your economies geared to volume movement, volume production, volume consump-

tion. I would assume that practice would certainly apply where you have two and a half million tons of coal involved per year.

Q In regard to the Industry Field, do you believe that the coal reserves at this field now owned by United Electric will never be used by United Electric for a mine?

A Boy, that is a hard question to answer. Let me put it this way. If during my regime as vice president of sales of United Electric, I could have come up with some sort of an idea for a sale, a combination of transportation and combinations where I could actually go somewhere [171] and sell that coal, I think I would have been the happiest fellow in the world. As pleased as I was that we were able to put together some of these other contracts that we did, you know how proud you are when you do a good job, you just kind of feel that, well, this is something that I worked hard on and it worked out pretty well. If there was one thing I could have done before I got out of the sales end of it at United Electric, if I could have put together something that I could have said, all right, let's go ahead and see if we can open up the Industry Field, I would have done it, but I was unable to do so.

Q Mr. Tarzy, in your opinion, is it possible that some day in the future the Industry Field will be opened?

A Somebody is going to have to figure out a way where somebody can make some money out of it. Does that answer your question?

MR. HEDLUND: Mr. Cusack, all things are possible, I suppose, in a sense. Mr. Tarzy has said that if you could figure out a way to sell the coal there at a profit, it will probably be mined. I believe that is [172] the thrust of his testimony.

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[179] Q Do you recall the interest of Iowa Illinois Gas and Electric Company in regard to the McDonough County coals?

A I remember the incident, and I believe that matter

was being handled by Mr. Ed Butler of our company when he was sales manager of our company.

Q Getting back to our discussion this morning in regard to the principal customers of United Electric, Mr. Tarzy, did you ever call on the M. F. Hughes Coal and Oil Company?

A No, I never called on them, but I did talk with Mr. Hughes on the phone on a number of occasions.

Q And did the Hughes Coal and Oil Company purchase coal from United Electric?

A I believe they did. Now, I have a recollection on that, I think Hughes was a customer of either Freeman or Material Service. He was a retail coal dealer and it was a very small account, I mean it is a retail dealer account, and I normally didn't get into such. I had contact with it and I was supposed to know what was going on, but it was such a small part of [180] our business that I didn't pay any specific attention to it.

Q Do you know which mine of United Electric supplied Hughes?

A Let me see. I think most of the business that we did with Hughes, and this is strictly from memory, I think was with the Board of Education. I think it was bid business mostly, where we would ship from the mine, as I recall it, to the retail yard, and then he would deliver it. I think later didn't he establish a barge dock and then deliver his coal off of the barge dock, or something like that? I don't remember. It wasn't a significant piece of business.

Q But would United Electric Fulton County mines have supplied the Hughes Company?

A I would say, being a retail coal dealer, probably Fulton County coal was too poor a quality of coal for him to handle. As a general rule, and the company records would show that, but usually a retail coal dealer would want to buy a higher quality of coal, like maybe Banner, and then another step further down to our Fidelity Coal. But normally Fulton County coal as such [181] was strictly a utility industrial coal.

Q Mr. Tarzy, did you call on the Caterpillar Tractor Company?

A Yes.

Q Who did you call on there?

A Let's see. He wasn't the purchasing agent. He was director of purchases. Is his name important? I think it might come to me.

Q Well, if you think of it, let us know.

A Yes, I will let you know. It will come to me, but it is an unusual name, and I did play golf with him one time, so I do remember his name. I think he won a quarter from me or something.

Q What plants of Caterpillar did United Electric supply?

A We supplied their Aurora plant, I believe it was, and also their plants I believe in East Peoria.

Q And from what mines, sir?

A The Cuba Mine.

Q Was this Aurora plant the same as Montgomery?

A Yes, I am sorry. Montgomery was the [182] shipping point and Aurora was the town that the plant was located in or near.

Q And the coal came out of the Cuba Mine?

A That is right.

Q Did you ever call on Keystone Steel & Wire Company?

A I have visited with them on occasion, but that particular account was handled out of our Peoria office.

Q And that was for the Keystone Wire plant in Peoria?

A Correct.

Q And that coal came from what mine?

A The Cuba Mine.

Q Did you ever call on Lehigh Portland Cement Company?

A Yes.

Q Where is that headquartered?

A Their headquarters are in Allentown, Pennsylvania.

Q Did you call on Lehigh—who did you call on at Lehigh?

A Mr. Jones.

[183] Q Did United Electric supply coal to Lehigh?

A Yes.

Q For what plants, sir?

A We supplied coal initially for their, either Oglesby or LaSalle, Oglesby and LaSalle are kind of sister cities. I don't know whether they call it the Oglesby plant or the LaSalle plant.

Q That is in Illinois, isn't it?

A That is right. Up to a time when they shut the plant down because it became uneconomical to operate it, and then from that point on we attempted to sell them, I believe, our Fidelity coal for their Mason City plant.

Q It is a fact, is it not, that United Electric did sell coal to the Mason City, Iowa plant of Lehigh from the Fidelity Mine?

A I believe we started out by shipping them Fidelity coal, at least that is what we were attempting to do, but the Fidelity coal, I believe, didn't turn out to be of good enough quality to be able to carry their requirements and their load.

[184] Q Was United Electric then canceled?

A No. I believe, scratching my memory again, I believe, rather than losing the business—nobody likes to lose business—since they wanted a higher quality of coal and were willing to pay, I think, a little premium for it, I think we were successful in obtaining some coal from Freeman to put on that order. I am a little bit hazy on that. The records would show it.

Q Was the Mason City plant of Lehigh capable of being supplied by the Banner mine?

A No. Oh, no. It was strictly a rail plant, and Banner, of course, is strictly a barge.

Q Do you know whether or not United Electric sold any coal to Peabody?

MR. HEDLUND: Ever?

BY MR. CUSACK:

Q Between 1960 and 1966.

A Yes, we did.

Q Where was that shipped to?

A Well, let me see. Of course, Crerar & Clinch, you

know, is the retail outlet for Peabody [185] Coal Company.

Q Yes, sir.

A So we did ship them some coal. I think we actually may have got the purchase orders from Peabody and shipped the coal to Crerar & Clinch. I believe on some occasions when they ran short of coal, I believe in Fulton County, and we had the coal available, we would sell them some of our Fulton County coal. The records would show that. Do you know these things or are you—

Q No, sir.

A You don't? I was just wondering how I was scoring.

MR. HEDLUND: You mean with respect to your recollection?

THE WITNESS: Yes. I mean, you are asking me some things that go back pretty far, you know.

MR. CUSACK: No, we are not testing your recollection. What we are trying to do is obtain facts.

THE WITNESS: O. K. I will give them to you as I understand them, but they may not be exactly pinpointed.

[186] MR. CUSACK: I understand. We are trying to determine the facts of the case.

I am reading from a schedule, but it is not of evidence.

THE WITNESS: All right.

BY MR. CUSACK:

Q Did United Electric sell coal to Inland Steel Company?

A Yes.

Q Who handled this account at United Electric?

A I believe I started out handling that one, and then I believe Ed Butler and Jess Gildhaus and Dick Hampson, I think, followed through on it.

Q Who did you people deal with at Inland?

A I believe Mr. Don Haupt, who was the original contact we had, and he was promoted, and the name I recall is a Mr. Bowman who took his place, but I think about that time I got out of the picture.

Q For what plant of Inland Steel was this coal?

A Indiana Harbor plant.

Q East Chicago, Indiana?

[187] A Yes.

Q Was this steam coal?

A Yes.

Q Is it a fact that Freeman also supplied coal to the East Chicago, Indiana plant of Inland Steel?

A I think they did. Well, most steel companies, I think, require metallurgical coal, and I think they would be a likely prospect for metallurgical coal, and Freeman had metallurgical coal which we didn't, so I mean, a natural assumption is that maybe they did.

Q Do you know whether Freeman supplied any steam coal to Inland Steel?

A No, I am not sure.

Q Is it a fact that United Electric sold coal to Central Illinois Electric and Gas Company in Rockford?

A Yes, we did.

Q For what plants was that?

A That was for the Saybrook and Fordham plants.

Q Where was this coal shipped?

A It was shipped from the Fidelity Mine— [188] let's see, this was in 1966—yes. About the time I was getting ready to leave, I think they were having some difficulty in being able to use the Fidelity type coal, a similar instance to the Lehigh thing, that we tried to retain the business by maybe getting some higher quality coal from Freeman. I don't know whether that was effected or not, but I think that was going on about the time I left.

Q Is it your recollection that Freeman in effect backstopped United Electric on this contract with Central Illinois Electric and Gas?

A Backstopped? What do you mean?

Q Well, did it take up the contract?

A Well, let's see, yes, I believe we had a contract then, and if we were, of course, unable to fulfill our contract, we would make every effort to do so, and if we could get Freeman to help us out, very much similar to that TVA thing I was talking about, vice versa, yes, we would do it.

Q The generating plants of the Central Illinois Gas and Electric Company are located in the northern part of the state?

[196] First of all, you have to find somebody who uses coal. Am I getting down to it?

Q Fine.

A Back in the old days we used to chase smokestacks, you know, down railroad tracks, and this is the way you try to find an ultimate user of coal. But it has gotten a little bit more scientific today. Through your experience, salesmen's experience in the coal business, you pretty well know who the established users of coal are. Then in our case, in the case of United Electric, if we were a producer of coal, and let's take specifically a coal mine—I think I can simplify this thing because I don't think we want to take too long on this, and maybe I can illustrate the point. Let's take the Banner Mine. We are going to put the Banner Mine in, and we have established no sales for it, so the Banner Mine is a barge loading mine, so the first thing that a salesman would look for would be people that use barge coal. That would be a natural assumption. Say you would go up to the power plants up and down the [197] Illinois River, mostly up because that is where the market is, the natural market for the coal, and you would call on the purchasing agent or the fuel buyer, tell him about your product, try to sell him on the virtues of your coal versus the coal that he was using, and naturally the buyer was interested in making the best purchase he could.

Once you established the fact that he could use your coal and your coal could fit into the equipment that he had, and so forth, then you would get down to the matter of economics. If he felt that the use of the coal that I or any other coal salesman might offer to him would be of better use to his company or corporation, he would possibly, to confirm the results that the coal salesman had predicted for the coal, would probably run a test on the coal. That way he would be able to determine the quality of the coal, its application to the particular equipment that it was going to be burned on, and all

those sorts of things. If the test worked out pretty well, it would eventually wind up into a negotiated contract, and you would have sold [198] some coal.

[214] A I never studied it that close, sir.

Q Have you ever heard anyone say it was inaccurate?

A I would have to go back—here I am scratching my memory again. I think I did find a few discrepancies in it, but I wouldn't know. I mean, you would have to go over it with a fine-tooth comb and say maybe this mine wasn't on all of those railroads, or maybe that one railroad didn't belong to that mine, or something like that. It would be one of those things.

Q All right. Now, back to my original question, and having reference to Tarzy Deposition Exhibit 1, could you tell us, sir, with what companies United Electric was in competition?

I point out to you that this map does purport to show the companies and the mines located in the Eastern Interior Coal Mining Districts 9, 10 and 11.

Incidentally, what do they call this coal field, the coal field that encompasses Illinois, Indiana and West Kentucky?

A We usually refer to it as the Midwest Coal Fields.

[215] Q Have you ever heard it referred to as the Eastern Interior Coal Province?

A Maybe I might have, but then I would have to say do you really mean the Midwest Coal Field? That is what I would have to say.

Q Right. That is what we mean.

Now, could you tell us, Mr. Tarzy, again with what companies United Electric was in competition with in 1966?

A In 1966, or do you want to refer to the date of this map?

Q All right. Let's do it in 1963 then.

A Let me see if I can scratch this out. Now, Fulton County, we would compete with other Fulton County operators that had similar coals, so the first thing to do would be to go to Fulton County. All right, here is the Sun Spot Mine—is that the actual name, Thunderbird Collieries Corporation?

Q Yes, that is the operator, Ayrshire.

A Ayrshire Coal Company.

This mine is out of business.

Q You mean the Flamingo?

A The Flamingo Mine is out of business. [216] When they ran out of reserves there, they went over and opened up the Sun Spot Mine.

Q That is interesting. Do you mean when the Thunderbird Collieries ran out of reserves in Fulton County, they opened the Sun Spot Mine?

A That is correct.

Q Which is the same seam as the Industry Field?

A Yes.

Q Who else, sir, would United Electric be in competition with in 1963?

A Fulton County, Little Sister—no, I guess that is now controlled by Truax-Traer Coal Company. Here, Truax-Traer Coal Company, their Red Ember Mine. And Peabody Coal Company, the Edwards Mine.

Q That is in Peoria County?

A Right. The Key Mine is out of business.

Q The Key Mine of Peabody, which was located in Astoria?

A Peabody Coal Company, I believe they have combined these mines, but I think they call it the Middle Grove Mine.

This mine is a small truck mine, and [217] it never has been—that is the Laura Mine of Pioneer.

. . . .

[222] Q Let's go back to the Fidelity Mine and find out who the competitors are or were, at least, in 1963 when the map was published, and [223] in 1966 when you left United Electric, who the competitors of Fidelity Mine were, wherever located, even in Pennsylvania.

A Well, we considered our competition to be the people that were in the same freight rate district that had the same type of coal, that could handle the coal the same way we did. That was our competition.

Q What about producers operating in the Southern Illinois freight rate district?

A We didn't consider them prime competition. The river business was the big business for Belleville, and

the Belleville producers, because of their transportation advantage to the river, were the ones that were competing. I would say Southern Illinois, unless it was distress coal, wouldn't compete, or coal of say similar nature like dust or carbon, stuff like that. You are familiar with what I mean by that.

Q No. Would you explain it, please?

A Well, dust and carbon are kind of byproducts of coal, that are kind of left over when you are making a premium product. For [224] instance, if you were going to make metallurgical coal and you wanted to make it as high quality as you can and with the least sulphur you can, you would probably take out some of the fines in the coal that contain the most impurities and the most sulphur, and that would be kind of a byproduct of the coal.

Q I see. Now specifically, did Fidelity Mine of United Electric at DuQuoin compete with any of the General Dynamics, the Freeman or Orient Mines, which are in the Southern Illinois freight rate district?

A Are you going to talk specifics now, like Northern States Power?

Q Well, did they?

A Not particularly at Northern States Power.

Q Do you know whether Freeman shipped any coal to Northern States Power?

A No, I don't. If it did, it was strictly just kind of one of those emergency things, or something like that.

Q What about Union Electric?

A Union Electric, I believe they did ship [225] coal to Union Electric, but there again the time I was there, I think it was this byproduct thing I was talking to you about.

Q They shipped byproduct coal?

A Now, wait a minute. The byproduct I mean is the dust and the carbon that was kind of left over.

Q Would Freeman be shipping this?

A Yes, they would be shipping it.

Q To Union?

A To Union Electric.

Q What would United Electric be shipping?

A Well, we have a long term, in 1966, and I pre-

sume it is still in effect, a long term contract with Union Electric on our Belleville screenings, that is, you know, our regular product to ship to the Merrimac plant of Union Electric, and that went rail-barge.

Q Do you know whether Freeman shipped into the Merrimac plant?

A Well, as I remember, there were three basic contracts to take care of the Merrimac plant, and that was United Electric, Truax-Traer, and Peabody Coal Company. They were basic long [226] term contracts, and if Freeman did ship in there, it would probably be this dust or carbon thing which would be kind of a, well, what would you call it? Supplementary or spot business or something like that.

Q Do you know of any other customer which was supplied from 1960 to 1966 from both the Fidelity Mine and any of the Freeman Mines, either the Crown, Orient No. 3, Orient No. 4 or Orient No. 5?

MR. HEDLUND: Other than the ones he has mentioned?

MR. CUSACK: Other than the ones he has mentioned. Thank you.

THE WITNESS: May I have that again?

Q (Read by the reporter.)

BY THE WITNESS:

A Regardless of how small it was? You want something that amounts to something, don't you?

BY MR. CUSACK:

Q Tell us any, and then qualify it by how much, if you know.

A Keokuk Electric Metals, for instance, [227] Keokuk, Iowa, I think, took some coal from both us and Freeman.

Q Do you want to try to say how much or qualify it?

A I think their total burn was about 80,000 tons. It was kind of a small piece of business.

Q Did United Electric and Freeman split this business?

MR. HEDLUND: I am going to object to that question as worded. I don't understand it.

BY MR. CUSACK:

Q Did United Electric and Freeman supply together all of the requirements of Keokuk?

A No, we didn't supply it together. We shipped it separately.

Q Separately, but did you supply all the requirements?

A They got an order there, and they tried hard to get an order, and we tried just as hard to get an order for ourselves.

Q You were in competition, in other words, on this business?

[228] A I would say so, yes.

Q When did you get this business? When did you negotiate this contract?

A I don't know whether we still have the business or not, but we have shipped Keokuk Electric Metals as long as I was vice president of sales.

Q Did Freeman also ship to Keokuk Electric Metals from 1960 to 1966?

A That I don't know. I do recall at some time during the middle '60's that we learned about this. But when you talk about competition on this sort of thing—

Q What do you mean we learned about this? Learned about what?

A You are saying when were you competing with them. Actually, this thing of competition is such that you are trying to sell equal products, you know, and trying to do your best to make the best deal.

Q We don't object to that.

A I know that, but in these cases that I mentioned with Union Electric and with this Keokuk Electric, basically we weren't competing [229] with them because they had a different type of coal out of a different freight rate district. But these things that I am mentioning now, in the case of Union Electric, they shipped their so-called byproduct, dust and stuff, that it was kind of hard to get rid of, and we in the normal conduct of business couldn't compete with anybody in Southern Illinois, Freeman or Old Ben or Bell and Zoller that had any of this dust to sell because it wasn't an equal competitive product. If they wanted the business, wanted

it bad enough, nobody could compete with them. You see my point?

Q Yes, but Freeman didn't sell dust to Keokuk, did they?

A Yes, it was dust and carbon. Oh, yes.

Q And you sold screenings?

A Yes, that is all we had to sell.

Q There was no way that you could get dust out of your mines, out of the Fidelity mines?

A Well, there are different types of coal. Southern Illinois coal is of such quality that they tried to upgrade it into metallurgical [230] type coal and stuff like that to get the highest possible realization, and so in making this so-called byproduct of dust, they came up with a product that, well, nobody can compete with.

Q All right. Now, other than Keokuk, other than Union Electric, what other customers were supplied by Fidelity Mines of United Electric and any other mines of Freeman?

MR. HEDLUND: He has also mentioned TVA.

MR. CUSACK: Right. That was this morning. Thank you.

BY THE WITNESS:

A This comes to mind, I think Dairyland Power Cooperative, the same situation, dust and carbon versus our Fidelity screenings.

BY MR. CUSACK:

Q How would Dairyland Power handle this? Would they mix the screenings with the dust and the carbon?

A Yes, it was a very difficult product to handle. I mean, it would blow and they would complain about it. You would put it in a car, and if you get a heavy wind, it would all blow [231] away, and they wouldn't get the weight they wanted for the coal. It was kind of a messy sort of thing.

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[232] MR. HEDLUND: I don't understand it even with the question properly punctuated.

THE WITNESS: I think I know what he means.

BY MR. CUSACK:

Q Let's run it through again. What advantage, if any, did the dust and screenings of the Crown Mines, of the Orient Mines, I should say—

A Not dust and screenings.

Q Excuse me. Dust and carbon of the Orient Mines over the screenings of the Fidelity, if any?

A What advantage? The price.

Q Is it more or less a dump product?

A I have described it that way.

Q O. K. Now, how much would Freeman sell this for per ton, do you know?

A I don't know. We just recognized the fact that if dust and carbon were available, it was just kind of tough to compete with, period.

Q Are you familiar with the troubles that Union Electric has been having with regard to air pollution?

[233] A Not recently, no. I think there has been a lot of stuff in the press, as I get out there in Phoenix, that almost any utility is having trouble with air pollution problems.

Q Do you read the NCA News?

A Yes, I do.

Q Are you aware of the article in the NCA News where the City of St. Louis was almost going to close down the generating plant of Union Electric because of high pollution?

A The way I read the articles, I don't think it got quite that serious, but it might have sounded that way.

Q All right. Now, is there a greater sulfur emission from carbon and dust than there is from screenings?

A It is one of those things again, and may I kind of interpret that for you? In the boilers at Merrimac, all of the coal they get there is crushed down to a powder before it is burned anyway, so the initial size doesn't make any difference in the combustion process.

Q All right. Then my question goes to the carbon—

[234] A The same thing.

Q It doesn't make any difference then?

A No. It is all ground down to the consistency of face powder before it is blown into the boiler and burned.

Q So, in other words, the screenings end up to be like the dust and carbon anyway?

A At the burner.

Q At the burner. So by the time it gets into the burner, it is the same stuff, isn't it?

A Size-wise, yes.

Q Is there any difference in it other than size? I mean, the size is the same. Is there any other difference?

A Well, you say the same. It might be the same consistency of fineness, but you have the matter of quality to go into.

Q Is the Southern Illinois dust and carbon of a higher quality than the screenings of Belleville after it is pulverized?

A That is a tough one to answer. The washed Belleville screenings, let's just take the BTU, would run 11,200 to maybe 11,400, [235] somewhere in there, whereas the dust, depending on just how they want to upgrade the product, could be anything maybe from 10,000 maybe to 11,000 or maybe 11,500, depending upon what fraction of the coal that they have upgraded.

Q Keokuk Electric Metals, did they also pulverize your screenings?

A Yes.

Q And it was put into the boiler with the dust and carbon?

A Well, they would use them separately or interchangeably.

Q Or mix them?

A I mean it all depends. You see, they took the coal by barge up there, so it was just a matter of how the coal would arrive.

Q What about Dairyland Power, what would they do with the screenings?

A They pulverized it, too.

Q Did all the electrical generating stations pulverize coal?

A Oh, no, they don't. You want me to elaborate on that?

Q Sure.

[238] Q All right. Now, when you walk in the door to the purchasing agent of Commonwealth [239] Edison

Company to try to sell them some coal, who are your competitors there?

A Commonwealth Edison?

Q Right.

A You are talking about what kind of coal?

Q Any kind of coal. Who do you look upon as your competitors when you walk in the door of Commonwealth Edison Company and try to sell some coal?

A Well, you have to look at your Fulton County fellows that can ship by water. That would be Truax-Traer and Ayrshire and Peabody.

Q Who else?

A I can't recall any others from Fulton County.

Q What about the Crown Mine?

A Well, I think the Crown Mine, they are from Central Illinois, and they would compete with Mine No. 10, I think. Competition between Fulton County and Crown, Fulton County just has the advantage of their being closer to the river and their transportation.

[244] BY MR. CUSACK:

Q Can the Fulton County mines supply all of the coal requirements of Commonwealth Edison Company?

A I don't think so.

Q So Commonwealth Edison Company has to buy coal elsewhere, do they not?

A Yes, and I think they do.

Q They buy coal from the Southwestern Illinois Coal Corporation do they not?

A Right.

Q For their Joliet station?

A That is right.

Q And they buy coal from Freeman, do they not?

A I believe that is right.

Q And they buy coal from any other people?

A Peabody Coal Company?

Q The Mine No. 10 at Pawnee?

A Right.

Q But you do not consider United Electric to be in competition, as you know the term, with Freeman because it has a greater competitive advantage, is that correct? Because it has a [245] price advantage?

A Can I answer that my way?

Q Sure.

A Going back to the same illustration that I made on the dust, any time Southern Illinois wants any business and they have got dust to sell, dust is a byproduct and they have the advantage of a byproduct price, and Belleville cannot compete. The reverse situation is true as far as the river coal is concerned. If Fulton County wanted the business and takes full advantage of their more advantageous transportation costs, they can have all the business they want.

Q Now, wait a minute. You testified they can't supply all the coal requirements of Commonwealth Edison.

A I say all they want. I am talking about the shipper, us, for instance.

Q But they do sell all they want,, don't they? Doesn't United Electric sell all the coal it can produce?

A Well, when I was with the company in 1966, we had all we could production-wise to [246] take care of our orders.

In other words, we had all we could possibly want and ship and produce.

* * * *

[265] Q I believe it says, "However . . ."

A However, after what?

MR. HEDLUND: Discussing.

BY THE WITNESS:

A (Continuing)—discussing this further, we thought it may be—

BY MR. CUSACK:

Q This matter further.

A (Continuing)—delay making a bid, so I would say we didn't make a bid, from what it says in this letter.

Q Well, based on this document,, do you have a recollection that in February of 1961 United Electric was considering making a bid for contract for coal to be let by TVA?

A Let's see. Now, you say United Electric. This was an underground proposition. To go back just a little

bit, you know, we were the sale agents, United Electric was the sales agent for the strip coal from the Ruby Mine and we were approaching the time when those strip coals were going to be exhausted, and so forth, and so in conjunction with the Ruby Mine, they did also have the lease on the coal that [266] underlay the No. 11 and No. 12 seams, which is a No. 9 seam as you see here; right?

Q Yes.

A So this would have to be the Ruby underground mine, and in this case, not knowing anything about mining underground coal, we normally discuss these matters with our so-called free underground consultants, the Freeman Coal Mining Company, and that is what it meant. We discussed it with them to see whether they may be interested in mining this coal if we could, if we or they, I don't think it was decided at the time who would make the bid, whether we would make it or Freeman, but I would assume since it was going to be underground coal and we knew nothing about mining underground coal, that it would be a Freeman bid and that we were just calling it to their attention since we did have this relationship with the Ruby Mine.

Q Calling this to the attention of whom?

A To Freeman Coal Mining. You see, it says I talked to Mr. Nugent. He is Freeman Coal Mining, and Edwin Ruby is the one that had [267] control of the property.

Q Is it your testimony that in 1961 you talked to Mr. Nugent and asked him about the development of an underground mine at the Ruby Mine, the Ruby property?

MR. HEDLUND: I think that is what he just said.

BY THE WITNESS:

A Yes, I think that is what it meant, yes.

BY MR. CUSACK:

Q And you recall doing this?

A Yes. It is written right here.

Q Then it is contemplated that United Electric would not mine this property but that this Ruby Mine would be mined by Freeman?

A I had to go on the assumption because United

Electric couldn't mine anything underground. They weren't equipped to do it.

Q You know, do you not, that United Electric had an underground mine at Buffalo Creek?

A I don't know whether that was prior to my time or after my time, but I have heard [268] about it, and I understand it was not very successful.

Q But you know they did have an underground mine there?

A It is not an underground mine as such. In fact, I was down at the mine, I believe I was there with the—maybe that was my first inspection trip of the mines. They had reached a point in the mine where the high wall was so deep that they couldn't continue to strip it, so they thought they would kind of punch a hole in there with a mining machine and take a shot to see what they could do with underground mining that coal, and my recollection at the time when it was all over that it just didn't pay out. I just had very little to do with it.

Q Buffalo Creek coal was stoker coal, wasn't it?

A It was a domestic coal, and I think at the time there was a fairly good demand for the coal. There was still enough demand in the domestic market where the sales department was asking for more coal and the only way to get it was to try to supplement the stripping some [269] way.

[270] BY MR. CUSACK:

Q Who do you mean by we?

MR. KEMPF: Here we go.

BY THE WITNESS:

A Here we go, is right. Let's see. We—you notice I refer to a Davis Reed report in the P. S.

BY MR. CUSACK:

Q Yes.

A That was a report that was sent to us by Edwin Ruby. That was a feasibility and cost study in developing this property that was made by, I believe, Davis Reed was an engineer in West Kentucky, and he made that report for Edwin Ruby, and Edwin Ruby sent it to us, and of course we in turn would have to discuss it with

somebody that knew something about underground mines, so naturally we would take it to Freeman because we used to get free advice on underground mining from Freeman.

I imagine the "we" was maybe a [271] combination of Edwin Ruby and myself, and maybe Frank Nugent. I think that would be the logical way.

I mean, since 1961, I think that would kind of make sense if you would interpret it that way. But really, by we, I mean it had to be discussed further to find out just where we were going and be sure of what the costs were and what the situation was before you could make a bid on anything. So apparently the information at hand was incomplete, and we asked to do some more, get some more figures. Maybe, I would say possibly, if I had to reconstruct this thing, I would say that any good coal company, whether it is strip or underground, would not take the word of somebody else. They would go in and investigate a proposition with their own men and find out, you know, try to confirm some of the figures that were given to them. So I would think that this thing would have wound up, and this is maybe not the way it happened, but reconstructing it because I think this happened maybe several times when underground propositions came up, that Mr. Nugent possibly [272] wanted to send this report to one of his engineers or maybe send him down to the mine to look it over and look the conditions over, and that sort of thing.

Q Mr. Tarzy, United Electric did take an option on the Edwin Ruby property, didn't they?

A I think we talked about it at one time. I think Mr. Morris is the one that handled that. Do you want me to say yes or no? I can't say yes or no. I really don't know.

Q Mr. Tarzy, I ask you to examine what has been marked as Tarzy Deposition Exhibit 4, which is a letter from B. R. Gebhart to Mr. Morris, dated August 22, 1966. Does this refresh your recollection in regard to United Electric taking an option on the Ruby property?

A It says here that it appears we are now clear to let the option—I don't know whether that means that United Electric or Mr. Morris had it, or Freeman. . . .

. . . .

[288] Mr. Tarzy, does this first sentence refer to a contract between United Electric and TVA for United Electric to supply some coal to TVA?

A Yes, I believe it was. You are going pretty far back here.

Q Do you recall when that contract was entered into?

A Well, he refers to a "new TVA contract," so it must have been somewhere around that time.

Q And do you know how long that contract lasted?

A No, I don't, without checking the records.

If I may volunteer this, this was approaching, I believe, the tail end of our Ruby mine. I believe, if you will check the records, it almost has to be that. I can't recall of any other instance where it would happen.

The Ruby mine was petering out; it was running out of reserves, and we wanted to be able to sell the reserves up to, you know, the last week the mine operated, and so forth, so in order to be able to assure ourselves that we were going to be [289] able to ship any coal on any contractual commitment we made, we wanted to be sure we had some backup tonnage, and this sounds like one of those deals, where we wanted to be assured that we had some tonnage to back up any contract that we made with TVA.

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[361] Q Mr. Tarzy, I would like now to ask you a few questions in regard to generally where coal produced in Illinois is shipped.

Very generally, in reference to a map of the United States, which we will not mark as an exhibit. I don't really think it is necessary.

MR. CUSACK: Is that agreeable with counsel?

MR. HEDLUND: Yes.

BY MR. CUSACK:

Q Could you tell us, please, generally where the coal produced in the State of Illinois is shipped?

A I could probably do a little better job if you would ask me about the coals that I was familiar with, the Fulton County and the Belleville coals, because those are the ones that I followed in my sales career. Would that suffice?

Q Well, do you know generally where all the coal produced in Illinois generally went?

A No.

Q All right. Would you tell us then where the Fulton County coal went?

A Well, the Fulton County coal—I think [302] we discussed this a little bit yesterday. In our case, we had the Buckheart mine and the Banner mines located in Fulton County, and they were primarily mines which shipped barge coal, and they served plants up the Illinois River, as we discussed yesterday, the river plants of Commonwealth Edison, I think there is a cement plant, I believe, up there, but that was the general.

If you want to take, say, our loading docks in the Fulton County field, around Liverpool and Banner and generally up to Chicago, that would be our market for Fulton County river coal.

Q I see. Where else would it go?

A Well, that is the river. I think the farthest south we shipped the coal was the Mederosia plant.

Q And that is south of Banner?

A Yes. That was about the dividing line. Once you started to get down in this area (indicating), then we would be competing against ourselves with our Belleville coal, that went by river, you see.

Q You also had some Fulton County coal, did you not, of United Electric, that went into Wisconsin?

A If it was, it was strictly one of these [303] test deals.

[304] Q Where did this coal come from, that was [305] sent to this utility?

A Well, we wound up with a term contract with them to ship our Fidelity coal, via barge, up the Mississippi River to their Nelson Dewey plant at Cassville.

Q I see. I understand.

All right. Now, can we go into the areas where the Fidelity coal was shipped?

A Yes. Fidelity coal, our principal markets would be our river coal shipped to the river, either to the Ford dock originally, and I believe, when I was leaving there, it was going through the Kellogg dock, or it could go

through the East St. Louis dock, but anyway, it would wind up in a barge, and then it would be shipped northward to the various utility plants on the Mississippi River, via barge.

Q As far north as Minneapolis?

A Northern States Power at Minneapolis, correct.

Q And you also had coal from the Fidelity mine going to the Tennessee Valley plants in West Kentucky, did you not?

A Well, I think, as I have said a number of times before, we never did consider Fidelity coal [306] as being competitive on TVA business.

Q I ask you to answer the question, Mr. Tarzy.

A What is it?

MR. HEDLUND: He has answered it before, many times, Mr. Cusack.

BY MR. CUSACK:

Q The question is, that you had TVA coal going into the Tennessee Valley Authority plants in West Kentucky, is that correct, sir?

A Yes.

Q Did you have any Fidelity coal going to the TVA plants in the western part of Tennessee?

A No.

Q Did you have any Fidelity coal going into the St. Louis metropolitan market?

MR. HEDLUND: If the witness understands what you mean by the "St. Louis metropolitan market."

THE WITNESS: Yes. I can answer that question.

BY THE WITNESS:

A That was a natural market for our Fidelity coal. Yes.

[307] BY MR. CUSACK:

Q Do you know whether or not, except for metallurgical customers, any Eastern coal comes into the Midwest market?

A You mean into the Midwest territory—

Q Yes.

A —because "market" is what we kind of use as a potential sales market place, so to speak.

Q Yes, sir.

A Yes. I understood, and I think did know at one time, that quite a bit of what you might call Eastern coal did come into the, well, the steel mill region of the Chicago area.

Q That is metallurgical coal.

A That is what you asked, wasn't it?

Q I said, other than metallurgical coal.

A Oh. Other than metallurgical coal.

I didn't know of any substantial movements of coal.

Q Is it a fair statement to say, Mr. Tarzy, that the requirements for coal in the State of Illinois, with the exception of some metallurgical coal, are largely satisfied by coal produced in Illinois and in Indiana and in West Kentucky?

[308] A This is a very general question, isn't it?

Q Yes, sir.

A Oh, yes. That would be the natural market, I would say, for part of the coals that you are talking about.

Q Can you tell us what other areas or what other states or parts of states coal produced in Indiana, Illinois and West Kentucky is sent to or sold?

MR. HEDLUND: If you know, other than you have already testified to, and other than what you have testified to with respect to the shipments made by United Electric plants.

THE WITNESS: You are trying to find out just what states got some coal from this so-called Midwest coal region, is that right?

MR. CUSACK: Yes, sir.

THE WITNESS: Well, let me see that map again.

MR. CUSACK: Yes, sir.

I am showing Mr. Tarzy a road map of the United States.

[309] BY THE WITNESS:

A We mentioned Illinois.

BY MR. CUSACK:

Q Yes, sir.

A Wisconsin, Minnesota.

These are very general, of course. I mean, Minneapolis might be maybe the only spot where we could ship the coal.

Minnesota, Iowa, Missouri. Do you want to include West Kentucky, to my knowledge?

Q Yes.

A It wouldn't be recent knowledge, because you know I haven't been associated with West Kentucky since our Ruby mine mined out their reserves, but if you want me to take a guess at that, I will.

Q Yes, sir. Please.

A I think they would have probably shipped some coal into Arkansas, Mississippi, Tennessee, Kentucky and Indiana.

Q Now, Mr. Tarzy, do you know whether—

MR. HEDLUND: Have you finished your answer, Mr. Tarzy?

THE WITNESS: No, I am not finished.

[310] BY THE WITNESS:

A (Continuing) Now, that is generally speaking. Now, if you want what we considered in the trade unique movements that were inspired by unusual transportation arrangements. Do you know what I mean?

For instance, I would say that some West Kentucky coal, I understand, goes to Tampa, Florida, which is kind of an unusual, very specialized situation.

Is that what you had reference to?

BY MR. CUSACK:

Q No. I understand that is unique, isn't it?

A Yes. And of course you remember I told you yesterday that in a curious quirk of transportation, before the rail rates were reduced, we even shipped some of our Fulton County coal all the way around to Detroit, you recall.

Q That was very unusual, though, wasn't it?

A That is right. But you weren't asking me to refer to anything like that?

Q No.

A Well, I would say that that would be about it, generally. But you would have to get into speci- [311] fic plants to be able to pinpoint this thing. In other words,

I don't think you could say that our Fidelity coal, for instance, could serve all the points in the State of Minnesota.

Q I see.

Mr. Tarzy, do you know whether or not any coal produced in West Kentucky, Indiana and Illinois, which are Mining Districts 9, 10 and 11—

A Yes.

Q —do you know whether any of that coal is sold in Eastern Kentucky?

A Well, I know some of it goes to Louisville.

Q Is that considered Eastern Kentucky?

A Well, on this map it is about half way between east and west.

Q Do you know whether any coal produced in Illinois, Indiana and West Kentucky goes any further east in Kentucky than Louisville?

A I think at the time that I had anything to do with West Kentucky coal, I believe we kind of figured, the cost of the freight rates, that Louisville was about as far east that we could go at that time.

Q All right. Now, Mr. Tarzy, do you know whether or not any coal mined in Indiana, Illinois [312] and West Kentucky, that is, Mining Districts 9, 10 and 11, is sold in Ohio?

A Yes. That is another one of those unusual transportation things.

I believe, at the time we were interested in West Kentucky coal markets, it was coal that was coming out of the Green River that went to some of the power plants of the Cincinnati Gas and Electric Company.

Q Do you know whether that continued for any length of time?

A No. It wasn't part of our market pattern, and I couldn't answer that.

Q As a general rule, Mr. Tarzy, do you know whether or not coal produced in Illinois, Indiana and West Kentucky moves in any significant quantities into Ohio?

A It is not a natural market, as we considered it, when we were handling West Kentucky coal.

Q Now, in connection with the State of Iowa, do you know whether or not any substantial amounts of coal

produced in Illinois, Indiana and West Kentucky moves into the western portions of Iowa?

[313] A I wouldn't think so. It wouldn't look like a natural market. No.

Q And, Mr. Tarzy, in regard to the State of Missouri, do you know whether any coal produced in Illinois, Indiana and West Kentucky moves, in any significant quantities, into the western portions of the State of Missouri?

A Well, there again I think it is a similar situation, as the thing that applies to the western part of Iowa.

Q Your answer is that it does not?

A Yes. It wouldn't.

Q In regard to the State of Minnesota—

A Where is Sibley?

Q Sibley, Missouri?

A Yes. I think there was a power plant there, that we worked on at one time, that was getting some coal out of the Belleville field. We were unsuccessful in getting some of the business, but—

Q Was that a Union Electric plant?

A No. It was a Co-operative Electric plant. You would probably have to get a map of Missouri.

The reason why I remember it, following [314] your line of questioning here on this thing, at the time it was announced that there was some Belleville coal going out to Sibley, it was another one of those, what you might call an unusual movement.

Q Because Sibley was—

A It was, as I remember it, and if you will check the map, it is probably approaching the western portion of Missouri. You would have to check the map to find that out.

Q Mr. Tarzy, in regard to the State of Tennessee, do you know whether or not any coal, mined in Illinois, Indiana and West Kentucky, moves in any substantial or significant quantities into the eastern portion of Tennessee?

A We had better try to define what the eastern portion is, and I am still not too familiar with this thing. If you want more accurate or definite information, I think it would be well to go to somebody who has more familiarity with it. But if you want my recol-

lection from when we handled West Kentucky coal, we used to put some coal into Nashville from West Kentucky, and into Shelbyville and Murfreesboro, and I think in the latter stages of the Ruby mine, the L & N put in a rate that [315] would allow L & N shippers to ship to a TVA plant down at Widows Creek, which was on the Tennessee River, about in the middle of the state here somewhere, just south of the Tennessee line.

Q Do you recall, though, whether or not any coal, any Midwest coal, that is, coal mined in Illinois, Indiana and West Kentucky, went into the eastern half of Tennessee?

A No, normally it wouldn't, because you are getting into the Eastern Coal Fields there.

Q Incidentally, Mr. Tarzy, the coal mined in Illinois, Indiana and West Kentucky is referred to as what coal field, if there is a name for it?

A We referred to it as the Midwest Coal Field.

MR. HEDLUND: Off the record.

(There was a discussion off the record, after which the taking of the deposition was resumed as follows:)

BY MR. CUSACK:

Q Mr. Tarzy, I would like to ask you a few questions in regard to the general consumption of coal in the Midwest.

Among the conventional steam electric [316] plants in the State of Illinois—

Or are they more properly called steam generating plants?

A Yes.

Q (Continuing) —in the State of Illinois and in the Midwest, about what per cent of their fuel energy requirements are supplied by coal?

MR. HEDLUND: If you know.

BY THE WITNESS:

A Well, it is the predominant fuel, but to guess at the exact percentage, it would strictly be a guess.

BY MR. CUSACK:

Q Do you know whether or not the use of coal in the steam generating plants in Illinois and in the Midwest in recent years has increased or has decrease?

A I would say it would be on the increase.

Q And what fuels, if you know, have been on the decrease?

A Well, I think due to the ability of some of the natural gas companies to develop storage facilities, and what-not, I would believe that the consumption of gas—this you would have to take [317] from my knowledge of the marketing situations I ran into when I was familiar with it.

A good example, I would say, would be that Commonwealth Edison, for instance, used to use a lot of dump gas, and at the time I left, they had curtailed that substantially because of their installation of larger units and reduced transportation costs, and so forth, and so on.

Q Would you say generally, Mr. Tarzy, that the Illinois public utilities' use of natural gas has substantially declined over the last ten years?

MR. HEDLUND: If you understand what Mr. Cusack means by "substantial."

THE WITNESS: I think I know what he means.

BY THE WITNESS:

A I would say from my experience, when I was trying to sell coal, say ten years ago, we ran into the dump natural gas problem, sales-wise, more than we had, say maybe during 1965 or 1966.

BY MR. CUSACK:

Q Mr. Tarzy, do you have any information or do you have any opinion whether the use of coal by the steam generating plants in Illinois and in [318] the Midwest will increase or will decrease or will remain about the same in the next, say five or ten years?

A Well, along with some of the statistical work that I did, that was, of course, part of my job, trying to forecast what the utilities that we were particularly serving, or could possibly serve, would do, and we would have interviews with the utility people that we were dealing with, and also refer to any possible information that might be published anywhere else, primarily some of the forecasts that were made by, I believe, Joe Forsythe

of the Keystone Coal Buyers, and of course he was very bullish on the utility coal market, and we came up, if you just want a general answer from me on that, that there would be an increase in the coal burned.

Q In the Midwest?

A In the Midwest.

Q And in Illinois?

A And in Illinois.

This, of course, was prior to all this talk, which was becoming more alarming about the time that I left, in connection with air pollution [319] and nuclear power and all the rest of these things that we heard, and I don't know whether the experts now have revised their figures or not, because that was pretty substantial competition about the time I left to go out west.

* * *

[324] A I read an announcement, I believe it was either in the Wall Street Journal or maybe one of the local papers in the Phoenix area, that due to their anticipated delay in bringing in some nuclear units that they were planning on building some coal-fired units. Is that what you are referring to?

Q Yes.

Mr. Tarzy, do the electrical utilities in Illinois prefer coal over oil?

MR. HEDLUND: If you know.

BY THE WITNESS:

A Well, in my experience, yes, because oil was, from the standpoint of economics, not in the picture.

BY MR. CUSACK:

Q Was it more expensive?

A I would say, generally speaking, yes.

This is for the utilities, now, you are talking about?

Q Yes.

A Because there are a number of small installations that burn oil, you know.

Q I understand.

[325] Do you know why the electrical utilities in Illinois prefer coal over gas?

MR. HEDLUND: If they do.

BY MR. CUSACK:

Q Do they?

A No. In fact, I imagine, with some of this activity on air pollution—

In fact, I recall reading something again there in connection with Commonwealth Edison, where, at one of their Chicago plants, they felt that they were forced to burn some natural gas because of some pollution problems they were having in one of their Chicago area plants.

Q By "forced," do you mean they would have preferred to burn coal?

A Yes, because I would think that in that particular instance coal would be probably more economical to use than gas.

Q As a general rule, is coal more economical to use in Illinois, by electrical generating stations, than natural gas?

A If you will exclude the use of dump gas, I think the answer to that question would be yes.

Q And has the use of dump gas declined?

[326] A I think I answered that before.

Q Has it declined?

A Yes. The records would show that, but we felt, in our sales activity, that it had declined.

Q Is it fair to say, Mr. Tarzy, that the electrical utilities in Illinois rely heavily on coal?

A There again I know what you mean—

Q Let me rephrase the question.

Is it fair to say, Mr. Tarzy, that the electrical generating companies in Illinois rely primarily on coal as the fuel to power their stations?

A Yes.

Q Is this also true for the Midwest?

A Are you talking about the utilities that use Midwestern coal?

Q Yes.

A I would say, generally speaking, yes.

Q Other than electrical generating companies, Mr. Tarzy, what other fuel consumers rely primarily on coal?

A That is another one of those general ques- [327] tions, but you have cement plants, you have corn processing plants.

. . . .

[385] Q And do you know where this coal ended up?

A Yes. I believe it was in connection with a shipment that was going to Rail-to-Water. It must have been, because Mr. Sheridan, I believe, was their coal inspector or the fellow who handled their inspection at Rail-to-Water.

Q That is the Mr. Sheridan who is referred to in the first paragraph of this document?

A That is correct.

Q Do you know how much was involved in this shipment?

A Well, it was 1965, so that would be under the new unit train regulations. Well, the unit train regulations require that you ship a volume of coal. Now, whether this was 2,000 tons, 3,000 tons, but it would be in that neighborhood, because it required, in order to get the lower transportation cost, that you had to ship, you know, a part of a unit train or on a volume rate.

Q It is a fact, is it not, Mr. Tarzy, that in 1965 Freeman purchased a substantial amount of coal from the Fidelity Mine of United Electric, which coal was shipped over Rail-to-Water?

[386] A I don't know what you mean by "substantial." We had hoped it would be a lot more than it was, because we needed the business, but—

Q Approximately how much was it?

A I am going to guess. The records would show, but I am guessing, strictly a guess, I would say maybe 50,000 tons, maybe 75,000 tons.

Q Was it at least 50,000 tons?

A That is a guess.

Q In 1966, Mr. Tarzy, can you give us approximately how many tons the Fidelity Mine of United Electric supplied to Freeman for shipment over Rail-to-Water?

A This is another, strictly a guess, I would say approximately it would be about the same amount.

Q Approximately 50,000 to 75,000 tons?

A I am guessing. Now, don't hold me to it. The records of the company would show it, and it would be very easy to dig that information out.

As I said, we hoped it would have been much more than that, but to us, it was a small shipment in propor-

tion. I think we were producing, I don't know, about five million tons of coal, or [387] something, at that time, so that would be kind of a small percentage of our business.

* * * * *

[389] That movement, I think, involves an annual [390] movement in excess of three million tons per year in shipments of 10,000 tons per shipment, and in this particular case they have even gone one better, with the rail equipment to be supplied by the customer, in this case Commonwealth Edison, and a further advantage in that case where the coal would originate from a mine on the same railroad to which the coal is delivered; in other words, a one-line haul. There you have all the components wherein a real economy could be accomplished, by a volume movement of coal via the unit train.

BY MR. CUSACK:

Q Thank you.

Mr. Tarzy, you testified that since December of 1966 you have been stationed in Phoenix, is that correct?

A Well, Phoenix and Sun City.

Q Do you have an office down there?

A My office is in my home now.

Q And that is in Sun City?

A Yes.

Q What do your duties consist of at the present time, and since December of 1966?

A Well, I am vice-president of Western [391] Operations.

I believe I went into this thing yesterday, didn't I?

Q Not completely.

A Oh, yes. I see what you mean.

Vice-president of Western Operations of The United Electric Coal Companies, and my duties are to coordinate and supervise the activities of our company and the marketing and exploration of coals in the western area of the country.

Q By "our company," do you mean United Electric?

A United Electric, yes.

Q Are you only employed by United Electric?

A My salary check says United Electric Coal Companies.

Q Are you only employed by United Electric?

A Yes.

Q And who reports to you, Mr. Tarzy?

A It seems like I am reporting to somebody else. I report to the president of United Electric.

Q And that is Mr. Camicia?

A Mr. Camicia.

.

[412] Q Do you know the ratio of it?

A No.

Q How many tons of coal does United Electric control by location at that deposit?

A I don't know.

Q Do you have any estimate?

A No.

Q All right. Other than the Oklahoma reserves, the New Mexico reserves, the Wyoming reserves, and the two Colorado reserves, what other reserves does United Electric own out West, either directly or indirectly?

A I don't know of any other.

Q Does United Electric own any reserves or look for any reserves at the Black Mesa, Arizona, area?

A I wasn't particularly involved in that thing, but I believe our engineering department was, yes.

Q Did United Electric do any prospecting at the Kaiparowits Plateau in Utah?

A We didn't do any exploration as such, but we did work on that property, on the Kaiparowits, [413] yes.

Q Well, could you tell us, very briefly, the properties that United Electric has prospected for out West?

MR. HEDLUND: Other than the ones that you have mentioned.

BY THE WITNESS:

A Well, I think it would be best to indicate to you—I want to be as helpful as I can on this thing—the projects that we are working on out there, out West—

BY MR. CUSACK:

Q Do you mean at the present time?

A Yes.

Q Fine.

A —that indicate to us the best promise, rather than trying to dig up some of this stuff that we probably know about out there but that show no immediate promise.

The largest project that we are interested now in working on out there is known as the Kaiparowits project. This is an area located in Southern Utah.

MR. HEDLUND: May I interrupt for just a [414] moment?

I had mentioned this, I think off the record, before we started, that you are in an area of high degree of confidentiality. The deposition won't be filed, but I would assume that this information will be covered under the protective order so that this may remain confidential.

You have been given a number of documents about the Kaiparowits Plateau, and Mr. Tarzy may be on the verge of giving you additional information. I want to make certain that the confidentiality of this material is maintained.

MR. CUSACK: That is agreeable.

MR. HEDLUND: Fine.

You may continue, Mr. Tarzy.

MR. CUSACK: Can we take a five-minute break?

MR. HEDLUND: Yes.

(There was a short recess, after which the taking of the deposition was resumed as follows:)

BY MR. CUSACK:

Q All right, Mr. Tarzy. Could you tell us [415] about the Kaiparowits Plateau and United Electric?

A Yes. I will try to make it as brief as possible.

Sometime prior to my going out, or being sent out to Arizona, we had received inquiries from what we called the Resources Group as to our interest in possibly mining some coal reserves that they held in the Kaiparowits Plateau region.

Q Who are the Resources Group?

A The Resources Group comprises the Southern California Edison Company, the San Diego Gas and Electric Company, and the Arizona Public Service Company.

Q I see. Thank you.

A They have, under lease, 45,000 acres of coal lands, or lands under which there should be coal, in the Southern

Utah area, not too far from a proposed power plant site on the northern shore of Lake Powell, which is astride the Arizona-Utah line at that point.

Q That is the Colorado River, isn't it?

A Yes.

Q Lake Powell was created by a dam on the Colorado River, is that right?

[416] A That is correct.

So we became interested in that project, and that was one of my first opportunities to get into the western coal thing.

If it developed as projected, they propose to develop a power plant there, fueled by coal, which will have an eventual capacity of 5,000 megawatts, which will require approximately 15 million tons of coal per year over a 35-year period.

Q Will this be a plant located at Lake Powell?

A Yes.

Q And how far is this from the coal fields?

A From the center of the coal fields controlled by the Resources Group, we had estimated it would be somewhere around 11 or 12 miles. The shortest distance probably was maybe 8 miles, 6 miles, something like that.

Q So the coal field then is almost adjacent to where they plan to put the power plant?

A Well, I wouldn't use the word "adjacent," because the cost of moving that coal, say 11 miles, is going to be a substantial portion of the total costs.

[417] Q Would this be by conveyor belt?

A Well, this is what we are considering, and have so suggested in the proposal that we have made.

Now, this project, of course, if it develops, would, to my knowledge, be the largest single power plant development in the country, and maybe in the world, as far as I know.

In addition to the 15 million tons of coal per year that they will require for 35 years to supply these units, if they are all put in, they are also investigating the possibility of using a liquefaction plant in connection with supplying the plant with its fuel.

Q The liquefaction means what, sir?

A This would mean that the coal, after it would be mined, would go through a processing plant which would

extract the hydrocarbons, et cetera, from the coal, and the resulting char, which is the material that would be left after its carbonization, would be sent to the plant to be burned as boiler fuel.

On that basis, if a project like that would develop, it would require the use of approximately [418] 30 million tons of coal per year for 35 years.

Q Just one thing, first. This power plant, where would its electricity go to?

A Well, are you familiar with the WEST Group?

Q Yes.

A Well, the WEST Group, of course, is composed of practically all of the important utilities out west, and if a plant like this would develop, the Resources Group would give the participants in the WEST program an opportunity to take, I guess, a proportionate share of the electricity that would come out of this plant.

Q Does this mean that the electricity coming out of this plant would be transported, as it were, by high transmission wires to, for example, the Southern California Edison Company?

A Yes.

Q In other words, the utilities on the West Coast?

A Yes. That is where your biggest growth is.

Q Approximately how far, then, would this [419] electricity be transmitted? In other words, approximately how far is the generating station on Lake Powell to the customers which would use this electricity?

A Well, part of it will probably go down to Phoenix, and that would be a distance of about 180 miles, I would say, or so, but your main power load—

That is the Glen Canyon Dam (indicating).

Q The Glen Canyon Dam is the dam that created Lake Powell?

A Correct. And the power plant location would be on the northern shore of Lake Powell.

Q That is in Utah?

A In Southern Utah, correct. Almost on the Utah-Arizona line.

So the power could come down to Phoenix, it could come out here (indicating).

They are building a plant here, on the Colorado River, you know, at Mohave.

Q That is to be supplied by Peabody?

A Correct. From the Black Mesa.

Q That is the Southern California Edison plant, is it not?

[420] A Well, no. There are several utilities involved in that. That still is under the WEST concept.

Q That is W-E-S-T?

A It is all capitals. W-E-S-T. That is Western Energy and Transmission—something or other.

So this power would tie in with the lines that they are already building in connection with this plant.

As you know, they have a big plant here at the Four Corners area.

Q WEST does?

A Well, certain members of WEST.

Q The Four Corners area is near Farmington, New Mexico, is it not?

A That is right.

So you asked the question about where the electricity would go, it would feed into the grid that is already in the process of being built.

Q And most of it would eventually end up in the Los Angeles area, the Southern California area?

A The biggest growth is there, and so far, [421] in most of the developments of this type, Southern California Edison has always taken the biggest share of it, because they are the largest utility involved, and they have the largest growth and the largest requirements.

Q Now, in regard to the supplying of the coal to this generating station at Lake Powell, is there any name for this station, by any chance? Is it referred to by any particular name?

A It is in such a preliminary stage, they still call it a project, the Kaiparowits Project.

Q I see. Now, do you believe that United Electric will be the coal company to supply this generating station?

A I am hoping that United Electric, and the work that we have been doing on it, will certainly have an opportunity to share in the development, if it does occur.

Q What other coal companies are active in this development?

A When they ask for bids—not bids; I should not say that, because it was strictly preliminary. I think

it was a matter of trying to create some interest by responsible coal companies, [422] and I believe they did publish a list of the companies that did attend the preliminary conferences, and among those companies were Peabody Coal Company, Consolidation Coal Company, North American Coal Corporation, of course United Electric, United Electric-Freeman.

Q In other words, all the leading United States producers?

A Well, for some reason or other, a good many of the so-called Eastern producers, and I think there was one other name, maybe Carbon Fuel, was the only name that I remember seeing on the list.

But anyway, they did publicise it, and all the companies that were interested did attend this initial conference.

Now, I don't know how many did actually submit proposals to mine this coal, other than ourselves, but I presume they did have some.

MR. CUSACK: Counsel, would you please furnish us with a copy of the United Electric proposal?

MR. HEDLUND: If you will add that to your letter.
[423] MR. CUSACK: Thank you.

BY MR. CUSACK:

Q When was this proposal submitted, Mr. Tarzy?

A This proposal was submitted in, I believe it was March of 1967.

Q Has it been acted upon yet?

A No.

Q If WEST accepts the proposal of United Electric, approximately how many tons of coal would United Electric expect to mine in this area?

A I wish I could answer that question. Let me, if I may—

MR. HEDLUND: I believe the witness has testified to estimates on the total amount of coal that will be mined per year. He has also testified that this may be a sharing proposition.

MR. CUSACK: And I am trying to determine, on that basis, approximately how much Mr. Tarzy estimates United Electric would be moving.

BY THE WITNESS:

A Well, let's get into a point here that I think you should know.

The Kaiparowitz coal lands are located [424] such—well, the project is known as the Kaiparowits Plateau Project, so it is located in and around a plateau, and we have what we think is a rather unique or unusual proposal, because United Electric proposes to go in and open up the operation by stripping some of the areas that indicate that there is some stripping available, but it is going to be a very small portion of the total tonnage that is going to be recovered from that acreage, so rather than go into a project of that size with such a small contribution, we have encouraged Freeman Coal Mining to join with us to back up our proposal, so to speak, because as soon as the little strip coal, if they decide to go that way, is mined, the majority of the coal has to be deep mined, and there again, that is the function of Freeman Coal Mining, and as I have said before, it is fortunate that we have them to back us up on a proposition like this.

BY MR. CUSACK:

Q Did Freeman join United Electric in this proposal to WEST?

A Yes, I think you will find that they are mentioned, and their capabilities in the deep mining [425] field, are mentioned in this proposal.

It is logical, and I think it made a good proposal, and I think it was well received that here were two companies, one who had expertise in strip mining and the other who had expertise in deep mining, to go in there and make a proposal to develop this property. I think it had a very beneficial effect, and without something like that, I don't think we would have gotten much consideration.

[426] Q When do you expect this contract to be awarded, if at all?

A Well, the group has been having projected negotiations on getting their water rights established, which is a very important thing.

Q Which group is that?

A Well, the Resources Group, the ones that are originally developing this, those three companies that I have mentioned.

I think they have got those negotiations pretty well behind them now. It is going to take an agreement with the Secretary of Interior as to the cooling water requirements for the plant, and so forth, and so on, and as soon as that thing is behind them, they have indicated to us that they will ask us to further refine the original proposal that we made in 1967. In other words, things can happen inside of a couple of years, and they have asked us, for instance, and which we have supplied them, with information as to what our estimate would be to maybe open up a test drift to determine what the mining conditions might be underground. I mean, you just can't use x-ray eyes and see what is underground; we want to know what the roof con- [427] ditions are, and what the floor conditions are, and so forth. So it is about in that stage.

I don't think there is much more I can add to it, unless you can think of something.

Q How thick is that coal seam at Kaiparowits?

A Oh, yes, that is a very important thing. It is a multiple-seam area, in which they have found as many as probably ten seams of coal in the coal-bearing strata, and the thickness of the coal would vary. Of course, I don't think they are considering anything under four feet as commercially minable, and the coal seams go up as high as 25 to 30 feet thick, so you will have a series of coal seams, some of them four feet thick, some of them ten feet, some of them 20, and the good thick ones, maybe 25 feet or so.

Q All right. Thank you.

Other than the Kaiparowits Plateau Project, has United Electric submitted any other proposals, or is it looking at any other coal reserves out in the West?

A Yes. Let me refer to one other proposal that shows some promise, and that is a proposal [428] to mine land that is owned or controlled by the Public Service of New Mexico.

. . . .

[5]

EXCERPTS FROM DEPOSITION OF
BURL CHARLES JENSEN, TAKEN NOVEMBER 21,
1968

* * *

MR. SAMUELSON: Mr. Jensen, will you speak up, please, so Mr. Futterman can hear you, too.

THE WITNESS: Yes.

MR. FUTTERMAN: Thank you, Mr. Samuelson.

BY MR. SIMS:

Q Were you given any particular title when you came to work with UEC in 1963?

A Yes; the title of geologist.

Q How are you employed at this present date?

A My title at present, my present title, is Production Engineer.

Q You are still employed by UEC?

A Yes.

Q Are there any other geologists now working for the UEC company?

A No.

Q When you came to work for UEC, were there any other geologists in the company?

A No.

Q Were you the chief geologist of United Electric, so to speak?

MR. SAMUELSON: You mean, the chief and only geologist?

MR. SIMS: Right.

[6] BY THE WITNESS:

A I was the only geologist.

BY MR. SIMS:

Q What other types of duties did you perform, let's say, while you had the title of geologist at UEC, when you first began working at UEC?

A I explored for coal mostly in the western United States and somewhat in Illinois. I estimated or evaluated

property, as far as coal reserves are concerned, in Illinois and in the western states.

Q Did you initiate what areas you would go in to explore, or were those areas designated to you by someone else?

MR. SAMUELSON: Would you repeat that question, please, Mr. Youker? I do not understand it.

Q (Read by the Reporter.)

MR. SAMUELSON: Do you understand the question? If you do, you may answer.

THE WITNESS: Would you repeat the question again, please?

MR. SIMS: Read the question again, please, Mr. Youker.

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[70] MR. SIMS: In other words, the witness may not have seen this map? I mean, you did not show this map to the witness?

MR. HEDLUND: Well, I do not know. You can ask him. We have not shown him this map in the past two or three days.

MR. SIMS: Does your objection to the forty-eight-hour rule still stand as to this document?

MR. HEDLUND: I have explained my interpretation of your letter, which was not clear, but you may continued with it, if you want to.

MR. SIMS: Tarzy Deposition Exhibit 1 purports to be a map of Illinois, western Indiana and western Kentucky, dated December, 1963, published by the Paul Weir Company, also entitled, "Shipping Coal Mines."

BY MR. SIMS:

Q Mr. Jensen, have you seen this document before?

A Yes. I have seen this document.

Q Where have you seen it?

A I would say in our office.

MR. SIMS: Off the record for just a [71] moment, please.

(There was a discussion off the record, after which the taking of the deposition was resumed as follows:)

MR. SIMS: On the record.

Does the standing stipulation apply to Tarzy Deposition Exhibit 1?

MR. HEDLUND: Yes, it does.

MR. SIMS: Thank you.

BY MR. SIMS:

Q Mr. Jensen, have you ever noted any inaccuracies on this map?

A I have never noted any.

Q Based on your knowledge and experience and the authorities you rely on as a geologist, does the area covered in green correctly delimit the coal bearing strata in Illinois, Indiana and western Kentucky?

MR. SAMUELSON: By "correctly", you mean what?

MR. SIMS: Accurately.

BY THE WITNESS:

A I would say in a very general sense it shows the approximate location of the coal-bearing [72] strata in this area.

BY MR. SIMS:

Q Would you say this area colored in green is a geologically united coal region?

A Geologically, yes.

Q In other ways do you believe this map is accurate?

MR. SAMUELSON: What was the question again, please, Mr. Youker?

Q (Read by the Reporter.)

MR. SAMUELSON: Could you define the "other ways", and also repeat the question?

MR. SIMS: The facts it purports to set forth on this map.

MR. SAMUELSON: What are those facts it purports to set forth, as stated on the map?

MR. SIMS: The document speaks for itself.

MR. SAMUELSON: Are you familiar with all of the facts that it states on this document? Are you familiar with the seam used, the carrier, the town and the county of all the mines mentioned on this map?

MR. SIMS: Is this a voir dire examination, Mr. Samuelson?

[99] Q You testified before that you have used these circulars during your work.

A Yes.

Q Can you point to any specific areas in which you feel that the IGS was incorrect in a particular circular when they said that Class 1 reserves would be present with reasonable certainty?

MR. SAMUELSON: Are you asking, can he, or will he at this time?

MR. SIMS: From his knowledge.

(There was a short interruption, after which the taking of the deposition was resumed as follows:)

MR. SAMUELSON: Do you have the question?

BY THE WITNESS:

A Yes. I do not remember the exact circular, but I believe the Sepo area is one area that—

BY MR. SIMS:

Q The Sepo area?

A Yes.

Q Do any other areas come to mind?

A Yes. I can remember the Augusta area.

Q Can you think of any others?

A I can remember the Roodhouse areas.

[100] Q Have you finished, Mr. Jensen? Are there any others?

A Any others?

Q Yes.

A I would say the Ottawa area. Is that enough?

Q I would like for you to cite as many areas as you can think of.

A More areas?

Q Yes.

A I would say the Galva area. I can't think of any more right offhand. I am sure there are more, though.

Q From your present recollection, can you think of

any areas in your drillings and experience that there has been coal, strippable coal, where the IGS indicated there was no strippable coal?

A Would you repeat that, please?

MR. SIMS: Will you read the question, please, Mr. Youker?

Q (Read by the Reporter.)

MR. SAMUELSON: Do you mean strippable coal as defined in the IGS circulars?

MR. SIMS: Yes.

* * *

[170] BY MR. SIMS:

Q Mr. Jensen, do you remember making an estimate for UEC on the tonnage of coal that could be recovered by the stripping method in the Sun Field area? I believe this area is mainly around the city of DuQuoin's water supply lake.

A I recall that area, yes, sir.

Q Do you recall making an estimate with respect to this area?

A Vaguely.

Q Do you remember what the estimate was?

A (No answer.)

Q Do you remember what the estimate was?

MR. SAMUELSON: What do you mean by "what the estimate was"? Total tonnage, overburden, what?

MR. SIMS: I asked him in the previous question, did he make an estimate for the company with respect to the tonnage of coal that was recoverable and could be recovered by the stripping method in the Sun Field.

MR. SAMUELSON: And he said vaguely.

MR. SIMS: He said vaguely.

* * *

[5]

EXCERPTS FROM DEPOSITION OF
THOMAS H. LATIMER, TAKEN DECEMBER 3-5, 1968

Q What was its successor's name?

A The Lake Charles Products Corporation.

Q What were your duties at this company?

A I was the Assistant Manager and Treasurer of the company.

Q When you left this company, where did you go to work?

A I was a District Engineer for the WPA in Southwest Louisiana.

Q What is the WPA?

A Works Progress Administration.

Q How long did you stay with the WPA?

A Until late 1936.

Q Where did you go from there?

A I came to work in January of 1937 for United Electric.

Q 1937?

A Yes.

Q What business was Lake Charles Products engaged in?

A We were manufacturing an edible cellulose.

Q You said you were an engineer with the WPA?

[6] A Yes.

Q Did you have any engineering training?

A Only what I picked up by association with other people, and by study, studies at home, and so forth.

Q What was your title when you came with UEC?

A I had no title. I was an instrument man in a survey party.

Q How long did you stay at this level?

A Not long. I was in the Engineering Department until about 1957, the Engineering and Operating Departments.

Q What other types of jobs did you have in the Engineering Department?

A All the engineering connected with the mines and operating the mines, except the mechanical engineering.

Q In 1957 what position did you attain?

A I still worked with the Engineering Department, but much more of my time was devoted to buying property.

Q Did you have—

A I might say that I started buying that [7] property on the side probably around 1939.

Q You started buying property around 1939?

A I think so.

Q For the company?

A Yes.

Q Did they tell you around 1939 that this would be an additional duty that you would have?

A I don't know that I was told it would be an additional duty. It was work I had to do. I was told to do it.

Q Were you put under any other superior at this time, or did you stay under the same superior?

A No. I was under the same superior.

Q Who was that?

A Until 1953.

Q Who was that?

A H. A. Reid.

Q What was his position?

A He was a Chief Engineer until early 1941, and then Vice-President until his death in 1953.

Q Vice-President in charge of what? Operations?

A Operations, yes.

[8] Q Now, Mr. Latimer—

A Pardon me, sir.

Q Yes.

A During several years of that I also reported to Guy Shorthouse, who was the General Superintendent. I worked very closely with him.

Q This was all in the Engineering Department?

A Engineering and Operating, yes.

Q Did UEC have a Land Department at that time?

A We never have had a real Land Department.

Q The duties of acquiring land or optioning land was really a function of the Operating Department?

A Of the Engineering Department. Most of the time I was the only one engaged in it.

Q You said you started buying land in 1939?

A Yes.

Q In 1957—why did you set this date apart?

A Why did what?

Q You mentioned before in 1957 that you [9] began buying land for the company.

A Not "began." I devoted more time to it.

Q I was under the impression that you distinguished the year 1957. What occurred in that year?

A Mr. Inman came into the—Inman was running the Engineering Department at that time.

Q And you began reporting to him?

A No. I reported from 1953 to 1964 to—well, during 1954 and 1955 to Mr. Shorthouse and H. D. Pinckney, who was then the Vice-President in charge of operations, and then to Mr. Hepburn.

Q But you never reported to Mr. Inman?

A No, no. I skipped over one thing. I did report, from 1948 to 1950, to G. H. Utterback, who was then Chief Engineer.

Q When did you begin reporting to Mr. Hepburn?

A As soon as he took over the operations in, I think, late 1955.

Q Did your duties change materially after 1939?

A After 1939?

Q Yes.

A Oh, yes, indeed. They were broadened [10] out more in the Engineering Department and in the Operating Department, as I knew more about the work.

Q In what manner were they broadened out?

A Well, the prospecting of new fields, the mapping of fields, estimates on production, estimates on coal tonnages and so forth.

Q In other words, as you began learning more about the business, you were given more freedom to go out and investigate fields?

A Certainly.

Q Did your title change in any manner?

A I do not think I ever had a formal title until two or three years ago.

Q Two or three years ago what title were you given?

A Manager of Lands.

Q Is that your present title?

A Yes.

Q You are presently now employed by UEC?

A Yes. I have everything to do with the property from the time it is thought of until it is mined and then after it is mined, the reclamation.

* * * *

[58] Q Did anyone in UEC instruct you to write this memorandum to Mr. Hepburn entitled, "Deep Coal Reserves in Southern Illinois"?

[59] A To the best of my memory, no.

Q Why did you write it?

A I wanted reserves.

Q Will you explain your answer?

A We knew our strippable reserve was limited. We needed reserves to keep us going.

Q Was this in southern Illinois or just generally?

A In general.

Q Is it your testimony, then, that to keep United Electric in business it was necessary to get more reserves?

A May I have that question read again?

MR. SIMS: Yes. Read the question, please, Mr. Youker.

Q (Read by the Reporter.)

BY THE WITNESS:

A Yes.

BY MR. SIMS:

Q Was it necessary to get deep reserves?

A Both strip and deep.

* * * *

[79] Q Do you know any reason why they have not acquired this property or optioned it?

[80] A To me the field does not look like much hope.

Q Didn't you just state that you would advise that they should option it?

A I would today. We need reserves badly.

Q Then why did you just state that it does not look like it is much hope?

A It doesn't.

Q In what regard do you mean?

A The information from the previous drill holes was inconclusive.

Q Then would you recommend that more drilling be done in the area?

A I think so.

Q Do you think there is a possibility that there are minable coal reserves in the area?

A Slight.

Q By "slight", how much do you mean?

MR. HEDLUND: Do you mean, how much of a possibility does he mean?

MR. SIMS: Yes.

BY THE WITNESS:

A We have proven no coal reserves at all there.

* * *

[84] Q Did you ever hear of the Salt Fork Field, consisting roughly, I think, of 6,000 acres in [85] Vermilion County?

A Yes.

Q Did you acquire options in this area for UEC?

A I had it done.

Q Do you know about when this was done?

A I would think in the late 1950's.

Q Do you know who took the options?

A If I didn't, E. B. Campbell did.

Q Who is he?

A A former employee of ours.

Q Is he still alive?

A As far as I know.

Q Where does he live?

A Kewaunee, Wisconsin.

Q Do you know when he left UEC?

A Within a year after those options were taken, I believe.

Q Did UEC do sufficient drilling, in your opinion, to determine what tonnage was in the area?

A Enough to give a rough estimate.

Q Do you know what the estimate was?

A I believe I would have to refer to the record.

[86] Q Approximately.

A I believe about 40,000 tons.

Q Did UEC exercise its options in this area?

A No.

Q Why did they drop the area?

A The overburden was quite heavy and it was not suited to any equipment we had.

Q Do you know how high the overburden was?

A There was no shallow overburden at all. It went directly from the river up to within a very short distance, perhaps to 85 feet, from there to over a hundred. In fact, I believe that the field averaged 101 feet.

Q You say it was not suited to any equipment UEC had at that time?

A No.

Q What did you say?

MR. HEDLUND: That is exactly what he said.

BY MR. SIMS:

Q Is that what you said?

A That is what I said.

Q This was in the late 1950's?

A I think so.

[87] Q Do you know if anyone has picked up this field, any coal company?

A On the Vermillion County plat book, Ayrshire Collieries is shown as the owner of some of the field.

Q About what portion of the field?

A I don't remember.

Q Who is Miller Spears?

A In connection with what?

Q I really do not know anything about his title or his company. The particular memorandum I am refer-

ring to discuss the Danville or Collison area. Does this refresh your recollection?

A Collison?

Q Collison. Does this refresh your memory?

A I think so.

Q Who would he be, then?

A It sounds like Miller Spears.

Q Who would Miller Spears be?

A His people have so many different companies, I don't know which company he would be connected with.

* * *

[165] Q After he was dismissed did UEC acquire any options in this area?

[166] A No.

Q Do you know why UEC has not gone into this area?

A I would have to read the contract with Bennett to tell you. However, the field is not attractive.

Q Why is it not attractive?

A It goes under the town of Galva. Your property would go right practically to the edge of town.

There are two hard roads cutting through it and two railroads cutting through it.

Q Mr. Latimer, you did recommend to UEC, did you not, that they hire this man to pick up the field?

A No, sir, I did not.

Q You were against this?

A I was certainly not for it.

Q Who did recommend that he be hired?

A I think Hepburn felt that we should take a chance on anything.

Q You mentioned something about a contract that you felt had something to do with UEC not going into this area?

[167] A I say, I would have to read that contract, but it is not an attractive area, anyhow.

Q But you do think there was a contract provision with Mr. Bennett that excluded UEC from going into the area?

A There might have been for a short time. I don't know.

Another thing I ought to point out was the old works in there, an unknown area.

Q You know, do you not, that Peabody has picked up these reserves?

A No. I do not know it.

Q Do you doubt this?

MR. HEDLUND: Oh, now, come on. I believe you are arguing with the witness. I am going to object to that. He said he does not know.

MR. SIMS: Off the record.

(There was a discussion off the record, after which the taking of the deposition was resumed as follows:)

MR. SIMS: Let the record show that the deposition of Mr. Latimer is being recessed until tomorrow morning at 10:00 o'clock.

(WHEREUPON the taking of the deposition of T. H. LATIMER was recessed until 10:00 o'clock a.m. of the following day.)

* * * *

[194] BY MR. SIMS:

Q Mr. Latimer, I direct your attention to the last paragraph of this document, on page 2, and the last sentence, which reads:

"I am inclined to believe that much of this coal is owned in large blocks by the owners or descendants of owners of the old mines and could be acquired at a pretty recent figure."

Did you check on this—

MR. HEDLUND: Did you say "decent" or "recent"?

MR. SIMS: I said "recent."

MR. HEDLUND: I believe the document says "decent."

MR. SIMS: Right.

BY MR. SIMS:

Q Did you check on the ownership of the blocks?

A I checked on some old records in our files. That is as far as I went.

Q Did UEC acquire any options in the area?

A No.

[195] Q Do you know why?

A This is strictly a deep mining proposition. Location-wise it is very good.

As far as the mining conditions are concerned, I understand it is not good.

Q From whom did you understand this?

A The mining conditions?

Q Yes.

A The coal miners.

Q Did you check with the Geological Survey as to the mining conditions?

A I think not.

Q Does any of their literature discuss, or do any of their publications discuss the mining conditions, the deep mining conditions—

A Not that I remember.

Q —in these two counties?

A Not that I remember.

Q Would there be a possibility of locating, say, at least fifty million tons of minable deep coal in these two counties?

A I don't know.

.

[205] Q Mr. Latimer, does this letter reflect the facts as you knew and believed them to be at [206] the time of the writing thereof?

A Would you repeat that, please?

Q Does this letter reflect the facts as you knew or believed them to be at the time of the writing?

A Yes.

Q I direct your attention to the first paragraph, the first sentence, which reads:

"We have discussed your proposition of the Du-Quoin Lake area and while we are interested in the area east of the hard road south of the black top road running east from the Sunfield 'Y'."

What was Mr. Heap's proposition on the DuQuoin Lake area?

A He held some options that he was trying to sell us.

Q Do you know how extensive these options were?

A Pretty extensive, but I can't remember the amount.

Q In the second paragraph, the first sentence reads:

"For your information our preliminary [207] estimate of the recoverable coal in this area is in the neighborhood of 12,000,000 tons . . ."

Did he have options in this area that you estimated?

A I don't remember.

Q Were there any other part of this proposition besides the mere selling of the options that he had?

MR. HEDLUND: May I have that again, please, Mr. Youker?

Q (Read by the Reporter.)

MR. HEDLUND: I do not believe that is a question, Mr. Sims.

MR. SIMS: Strike the question.

BY MR. SIMS:

Q Were there any other aspects of the proposition Mr. Heap made to you besides his selling to UEC the options that he had?

A I do not remember.

Q Do you remember any details about the selling of the options?

A No, I don't.

Q The second paragraph of the document, the last sentence, reads:

[208] "As you know, on an area of this size we feel that about 80 feet is the economically strippable depth though this height is due to change depending upon the estimated drilling and blasting cost."

Was the 12,000,000 ton estimate—strike that.

Was only coal under the 80 feet of overburden included in the 12,000,000 ton estimate?

A I don't remember.

Q Would this probably have been the case?

A It could be.

Q Do you estimate coal in an area that you do not consider economically strippable?

A Do we estimate coal that we do not—

Q Consider economically strippable.

A Yes.

Q But you do not know if that was the case in this particular instance?

A I cannot remember.

Q Do you know what Mr. Heap's estimate was on the coal in the area?

A Greater than ours.

Q Was it substantially greater, twice as [209] great, say?

A I don't remember.

Q What is the minimum amount of coal that you consider to be in this area, let's say under 80 feet of overburden?

A I can't remember.

Q Would it be over 5,000,000 tons?

A I imagine.

Q Has any data come to your attention or has a company drilled in this area after 1966 that would cause the company to change its estimate of 12,000,000 tons?

MR. HEDLUND: I object to that. That's two questions. I believe you first had better ask him whether they have drilled.

MR. SIMS: Let me rephrase the question, then.

BY MR. SIMS:

Q Has UEC drilled in this area after these discussions with Mr. Heap?

A I think not.

Q Has UEC acquired any data since the discussions with Mr. Heap that would cause you to change the preliminary estimate of 12,000,000 [210] tons in the field?

A Since this discussion?

Q Yes.

MR. HEDLUND: May I have the question read, please, Mr. Youker.

Q (Read by the Reporter.)

MR. HEDLUND: I do not believe, Mr. Sims, you have established when these discussions with Mr. Heap were or for how long they lasted. I do not think the record is going to be very clear in that regard unless you do.

MR. SIMS: I will rephrase the question, then.

BY MR. SIMS:

Q Mr. Latimer, do you know if any information came to the attention of UEC after the 12,000,000 ton estimate was made?

A I can't remember when we received accurate drill records on this property.

* * * *

[245] BY THE WITNESS:

A I would be very happy to answer that question if I could tell you without a reference.

BY MR. SIMS:

Q Could you give us an approximation?

A Not a close one.

Q Is there land now available to UEC west of Route 78 in North Canton Field that has strippable reserves?

A I don't know.

Q Is it possible that there is some land there?

A Available to United?

Q Yes, sir.

A Possible.

Q How much possible coal reserve tonnage is available to United Electric?

A I don't know.

Q Do you think it would be over five million tons?

A I don't know.

Q You have no idea whatsoever?

A I have nothing here to back up anything I say.

[246] Q Do you know if in the areas in which you drilled UEC exercised options or took leases?

A We bought some property.

Q Since 1960?

A Yes.

Q Does UEC still own this property?

A Yes.

Q Would you recommend that UEC do further optioning in this area west of 78 in the North Canton Field?

MR. HEDLUND: Mr. Sims, do you mean if they could?

MR. SIMS: If they could.

MR. HEDLUND: Under the present circumstances of the company?

BY MR. SIMS:

Q Will you answer the question, please?

MR. HEDLUND: May I have the question back, please.

Q (Read by the reporter.)

MR. HEDLUND: I object to the question. He may answer.

BY THE WITNESS:

A Perhaps.

. . . .

[281] BY MR. SIMS:

Q Mr. Latimer, do you know if there is a ceiling for the company in the North Canton Field?

A No, I don't.

Q Is United Electric at the present time interested in acquiring any additional coal reserves in the North Canton Field?

A Yes.

Q Are you prospecting in this area now?

A No.

Q Why not?

A We have no options.

Q Are you trying to take options?

A I haven't tried for some time.

Q Why not, Mr. Latimer?

A Frankly, I don't know where to go.

Q Would you explain your answer?

A We have discovered all the reserves in the east portion of the field that we know of, and in the west portion of the field there is no doubt there is property still owned by individuals. I don't know that it is coal reserve property.

[282] Q Before you find that out you have to drill it, do you not?

A You not only have to drill it, you have to be able to get together enough for an operation if you want it for yourself. If you want it for speculation, that is another thing.

Q How are you going to find out if there is enough coal in the east portion of the North Canton Field unless you drill it?

MR. HEDLUND: I believe he has testified that they have drilled the east portion of the North Canton Field.

BY THE WITNESS:

A We have drilled it.

BY MR. SIMS:

Q Why have you not then acquired options in the area?

MR. HEDLUND: I object to that question as contrary to what the witness has stated.

BY MR. SIMS:

Q Why have you not taken additional options in the area, Mr. Latimer?

A We are drilling, not only drilling, but we are behind in our drilling now in various [283] areas.

Q This is in the east portion?

A I didn't say that. I said in various areas.

Q What areas?

A At present, we are drilling at Buckheart, we may be drilling at Cuba. I haven't checked; we should be.

We should be drilling at DuQuoin.

Q Would you be optioning more in North Canton if you had the manpower?

MR. HEDLUND: I object to that question as you have not established that this drilling that has not been done is because of a lack of manpower.

BY MR. SIMS:

Q Is it because of a lack of manpower that you are behind in your drillings in the area?

A We are behind in our drilling everywhere.

Q why is that?

A We have no additional manpower or equipment.

Q How many drill crews do you have going?

[284] A I believe two.

Q Would that be one in DuQuoin and one in Fulton County?

A I don't think we have one running at DuQuoin. We may have a contract drill running there.

Q Do you have any other contract drillers?

A We have done lots of contract drillings.

Q At the present time do you have any contract drillings?

A At the present time contract drilling is very difficult to get.

Q At the present time does United Electric have any contract drillers?

A Not that I know of. We may have.

Q Is it a fact, then, that you now have two drill crews working?

A To my knowledge, we have two drill rigs working. How many crews are on those, I don't know. We may have a contract driller working at DuQuoin, but I haven't checked.

Q Where are these drill rigs working at the present time?

A I can't name the exact spots.

* * *

[404] Q Again, directing your attention to Latimer Deposition Exhibit 31 I would like for you [405] to update this map.

Under the legend, across from the yellow block, are the words, "Owned in fee."

Could you point out on this map what sections are now owned in fee other than those marked on the map?

A Very few, if any. I would have to refer to the record.

Q You cannot from your present recollection tell us approximately where the areas would be?

A Struck, 40 acres.

Q Would you describe where that is located?

A Northwest southwest Section 24-62.

Q Are there any other areas?

A Three or four acres off the north side of the northwest southeast Section 23-62, and that is all I can recollect.

Q Mr. Latimer, in your opinion, has UEC been remiss in not acquiring more reserves?

A Where?

Q Anywhere.

A Do you mean at the present moment or recent past?

[406] Q At any time during your employment with UEC.

A Where do you mean?

Q In the State of Illinois.

A In the State of Illinois?

Q Yes. If you would like, you can refer to Nugent Deposition Exhibit 38.

(There was a short interruption, after which the taking of the deposition was resumed, as follows:)

BY THE WITNESS:

A I think we have been remiss at times in the past.

BY MR. SIMS:

Q During what period?

A During the time I have been with the company.

Q Can you designate any specific period during which you have been with the company in which you thought the company should have been more aggressive in acquiring coal reserves?

A In the State of Illinois?

Q Yes, sir.

A Whenever coal was available, but we may [407] have not been remiss if we didn't have the money. I don't know.

Q In other words, under the circumstances you do not know whether it would have been wise for UEC to have purchased more reserves?

MR. HEDLUND: I object to that. I think that is an improper characterization of this witness' testimony. I believe you know how to ask a straight question.

BY MR. SIMS:

Q Is it your testimony that it is possible that United Electric was not in a position to buy more coal reserves?

A That I couldn't answer.

Q Can you tell us specifically what opportunities UEC had to purchase more coal reserves in the State of Illinois but did not do so?

A In what period?

Q From 1937 to the present time.

A Perhaps in the North Canton Field we were remiss.

Q During what period?

A From 1949 up to the sixties.

Q When in the sixties?

[408] MR. HEDLUND: I believe the witness said "up to."

MR. SIMS: He said "the sixties."

BY THE WITNESS:

A Until the various times we picked up acreages in the North Canton Field and along about that time.

BY MR. SIMS:

Q Was that in 1964 and 1965?

A Roughly those were probably the years.

Q What conversations did you have with anyone at UEC about picking up acreage in the North Canton Field during this period?

MR. HEDLUND: I am a little unclear as to which period you are referring to.

MR. SIMS: From 1948 until up in the sixties, to 1965.

THE WITNESS: '49, I believe I said, didn't I?

MR. CUSACK: Yes, sir, that is correct.

MR. SIMS: 1949.

BY THE WITNESS:

A I can't remember any specific conversation, but there were conversations, I am sure, many [409] times.

BY MR. SIMS:

Q With whom?

A With my superior.

Q Who would that have been during this period?

MR. HEDLUND: I believe he has already testified as to who his superiors were during this period.

BY MR. SIMS:

Q Mr. Latimer, would that have been Mr. Hepburn?

A During part of it.

Q Who else?

A Mr. Reid?

Q Mr. Inman?

A Reid, Pinckney, Shorthouse, Hepburn.

Q Nugent?

A Mr. Nugent wasn't in the picture as far as I was concerned.

Q Did you urge any of these men to pick up coal reserves in this North Canton area?

A I probably did.

Q When was the first time that you [410] recommended that the North Canton Field be picked up?

A In its entirety?

Q At any point, at any portion.

A I think about 1948. I am not exactly certain as to the date.

Q Did you write a memorandum to that effect at that time?

A I doubt it.

Q When was the first time that you recommended in writing that it be picked up?

MR. HEDLUND: If you recall.

MR. SIMS: If you recall.

BY THE WITNESS:

A I don't recall.

BY MR. SIMS:

Q When was the last time that you recommended that options be taken up in the North Canton Field?

A I don't recall.

Q Would it have been 1965?

A I don't recall.

Q Would it have been in the last few years?

A Your idea of "few" and mine might be [411] different.

Q In the last three years?

A I can't recall.

Q Would it be in the last five years?

A Probably.

Q Was your recommendation acted upon?

A At times.

Q At times was your recommendation not acted upon?

A Perhaps.

Q Do you know, Mr. Latimer?

A Within the last five years?

Q Yes, sir.

A I can't remember.

Q Other than the North Canton Field, were there other areas that you thought UEC was remiss in not acquiring?

A At one time we were remiss at Buckheart.

Q In what area was this?

A The northern portion of the field.

Q This area was later acquired, was it not?

A Yes.

Q What other areas did you feel UEC was remiss in not picking up?

[412] A In Illinois?

Q Yes, sir.

A Perhaps we were remiss in the Salt Fork Field.

Q Would you explain your answer?

A While it didn't look attractive at the time, it might have deserved more consideration.

Q Did you recommend that it should be taken up?

A At that time?

Q Yes.

A No, I did not.

Q Did you at that time recommend against taking up the field?

A Beg pardon?

Q Did you at that time recommend against taking up that field?

A I don't think I made the decision.

Q When was that, Mr. Latimer?

A I would think around '58 or '59, possibly a little sooner.

Q Would you now recommend taking up options in the Salt Fork Field if it was available?

[413] A I think I would.

Q Is it available?

A I know part of it is controlled by another coal company.

Q Is enough of it available to be worthwhile going back in?

A I don't know.

Q Have you any idea?

A I doubt it.

Q Did Ayrshire pick up this property?

A They were the other coal company I mentioned.

Q Did they pick up this property?

A According to the plat book they owned some property in the field.

Q When did they pick it up, Mr. Latimer?

A I don't know.

Q Was it since 1960?

A I don't know. I beg your pardon. Did you say since 1960?

Q Yes.

A Yes.

Q Was it since 1962?

A I don't know.

[414] Q Other than the areas you have mentioned, are there any other areas in Illinois that you think United Electric was remiss in not acquiring?

A While I was with the company?

Q Yes, sir, from 1937 on.

A We overlooked the Vermont Field, the Sun Spot Field of Ayrshire.

Q What do you mean, you overlooked it?

A We didn't realize it was there.

Q When was this?

A When we overlooked it?

Q Yes, sir.

A During the forties and fifties.

Q Would you blame anybody in specific for overlooking this field?

A Me.

Q Are there any other areas that you would say UEC was remiss in not picking up?

A Looking back, the company might have been remiss in not acquiring at least some key holdings in part of the present River King Field of Peabody Coal Company.

Q When was this?

A I doubt if they had the money. That [415] would have been 1937 to, perhaps, '41.

Q Was United Electric in pretty bad financial condition at that time?

A They certainly weren't in the best of health.

Q Are there any other areas that you felt United Electric was remiss in not taking up in Illinois?

A This all takes a little thinking. I am sorry.

MR. SIMS: Take your time, Mr. Latimer.

(There was a short interruption, after which the taking of the deposition was resumed, as follows:)

MR. SIMS: Would it help if you could see Nugent Deposition Exhibit 38?

THE WITNESS: I don't think so.

BY THE WITNESS:

A In Illinois I can't think of others without referring to all the maps and files.

BY MR. SIMS:

Q None others come to mind at the moment, is that correct, Mr. Latimer?

A Many years before that, in Illinois.

[416] Q Before what?

A Before '37, but not since.

Q What about in areas other than in Illinois?

A I think we erred in not prosecuting our options on the Gibraltar and Paradise Coal Fields in Muhlenberg County, Kentucky.

Q When was this property optioned?

A I would think 1946.

Q Are there any others?

A We had no option on the Key Coal Company properties—not Key, pardon me—Peabody Coal Company properties in the area bordering Green River.

Q Kentucky?

A Kentucky, in the western part of Ohio County.

Q When was this that you felt UEC should have gone into this territory?

A In the forties. We did go into it. I believe we did a little drilling in the field.

Q Did you recommend that the field be taken up?

A I don't remember. I don't think I would have made any recommendation.

[417] Q Did you recommend that the Gibraltar property be taken up?

A I don't think any recommendation—can I have that question again?

Q Did you recommend that the Gibraltar property be taken up?

A We had these properties under option.

Q Well, exercise the options?

A We weren't ready to exercise the options when we dropped them. We hadn't finished our drilling.

Q Did you recommend that they be dropped?

A No.

Q Who did?

A I don't know.

Q Other than the properties you have mentioned outside of Illinois, are there any other properties that UEC was remiss in not having picked up?

A Since I have been with the company?

Q Yes, sir.

A You are speaking of just in Kentucky?

Q Anywhere.

A Some of us thought it was a mistake to [418] give up the field we had under option at New Lexington, Ohio.

Q Is that the Sunny Hill Coal Mine?

A It became the Sunny Hill Mine.

Q Did you think it was a mistake?

A Personally?

Q Yes, sir.

A I think so.

Q Did you recommend that it be taken up at the time it was dropped?

A I don't think it was up to me to recommend that.

Q Did you feel that it should have been taken up at the time?

A Yes.

Q Are there any others?

A I think we were remiss in not getting into the west sooner.

Q What particular states are you referring to, Mr. Latimer?

A I am referring to the states of Wyoming, Colorado, New Mexico, Utah.

Q Why do you think they should have gone into the west sooner?

[419] A There would have been little competition.

Q Is there substantial competition in the west now?

A Yes, in parts of it.

Q Did you recommend that United Electric go into the west at an earlier date?

A I recommended it to my superior. That's the end of that answer.

Q Who was your superior?

A At that time, H. A. Reid.

Q When was this?

A It would have been prior to '53.

Q Do you know what he told you concerning this?

A He told me he wanted to, but I guess we would not do it.

Q Did he give you any reason?

A No.

Q Mr. Latimer, what, in your opinion, is the future of western coal?

A Well, I think it's pretty much publicly known that several of the oil companies have bought tremendous holdings of land or of coal for [420] the purpose of gasification and/or liquidation into a synthetic crude oil, land that they paid very substantial bonuses for leasing, could have been controlled for very small amounts of money. That applies to Wyoming and New Mexico and perhaps to a lesser extent in Colorado.

. . . .

[428] BY MR. SIMS:

Q Mr. Latimer, do you feel that the Industry Field will ever be mined?

A That decision would never be up to me.

Q Do you have an opinion of it?

A Under present conditions, I doubt it will be mined.

Q Ever?

A Ever is a long time.

Q What are the present conditions that you refer to?

A It's a small field, isolated, high cost, and I don't know whether or not the coal can be sold.

Q Do you think you were wrong in recommending that UEC go into this field?

A I could have been.

Q Mr. Latimer, what is your opinion of Mr. Kolbe as a coal executive?

MR. HEDLUND: Object.

. . . .

[3]

EXCERPTS FROM DEPOSITION OF
JOSEPH J. GALLAGHER TAKEN DECEMBER, 12,
1968

.
JOSEPH J. GALLAGHER

was called as a witness and having duly been sworn by
the notary public testified as follows:

DIRECT EXAMINATION

BY MR. FUTTERMAN:

Q Would you state your name, please?

A My name is Joseph J. Gallagher.

Q Where do you reside?

A I reside at 2322 North Burlington Street, Arlington, Virginia.

Q By whom are you currently employed, Mr. Gallagher?

A I am employed by the Bureau of Mines, United States Department of Interior.

Q What is your title?

A My title is Supervisory Industry Economist.

Q What are your duties in that position?

A My duties are the study of and preparation of reports on technical economic matters pertaining to the production, distribution and requirements of bituminous coal and lignite in the United States.

Q How long have you held the position you now hold?

A In the Government this is a question that becomes highly technical. When you say "this position", you mean the [4] position I just described?

.
[99] Q Are you familiar with the fact that the Fulton- [100] Peoria freight rate district generally encompasses mines located in the Fulton-Peoria area?

A I have.

Q You testified previously, Mr. Gallagher, to the fact that to your knowledge—

A I have testified to nothing in specific areas of Peoria, Illinois.

MR. FUTTERMAN: The record will show what he testified to, counsel.

MR. KEMPF: All right. Strike my question, I will start again.

BY MR. KEMPF:

Q Coal is a freight intensive commodity isn't it, Mr. Gallagher?

A Very much so.

Q And it is more than 200 miles from southern Illinois to the Fulton-Peoria area, isn't it?

A If you say it is, I'll take your word for it.

MR. KEMPF: The counsel for the government stipulates that for the purpose of this examination it is approximately 200 miles or so.

MR. FUTTERMAN: No.

MR. KEMPF: I would ask that—I would ask the record show that there is a scale indicating mileage on the map to which we are referring and that by taking a pencil [101] and measuring 200 miles, placing 200 miles, placing the pencil on the map it indicates that it is more than 200 miles from the southern Illinois area to the Fulton-Peoria area.

.

[103] **BY MR. KEMPF:**

Q During the course of your testimony at the time you were being examined by counsel for the plaintiff you were asked a number of questions on the basis of your knowledge and experience in the coal industry.

A Yes.

Q I am now going to ask you some questions on the same basis as counsel for the plaintiff asked them. I am asking you on the basis of your knowledge and experience in the coal industry, isn't it a fact, Mr. Gallagher, that anyone with even a minimum amount of knowledge of the coal industry knows there is a significant freight differential between coal mines in Fulton county—

Fulton-Peoria area and coal mines in the southern Illinois area when shipped to the Fulton-Peoria area?

MR. FUTTERMAN: I think the appropriate freight rate schedules will show what the differences, counsel.

THE WITNESS: Certainly it is, we know that.

BY MR. KEMPF:

Q Isn't it also a fact, Mr. Gallagher, based on your knowledge and experience again within the coal industry, that anyone with the minimum amount of knowledge or experience in the coal industry knows that because of the differential there are many customers within the Fulton-Peoria area who cannot be sold coal from southern Illinois on a competitive [104] basis with coal mined in the Fulton-Peoria area?

MR. FUTTERMAN: I object. What do you mean by the word "cannot". You mean ever? Is it impossible?

MR. KEMPF: That's precisely what I mean.

MR. FUTTERMAN: Thank you.

THE WITNESS: That is true. That is true normally, yes.

MR. KEMPF: I have no further questions.

THE WITNESS: I would also say that in addition to being true, sir, this is a point within the confines of a political subdivision known as the state of Illinois that we, the Bureau of Mines, are not referring to specifically, partially or otherwise. We are merely referring with the limitation to the state of Illinois and no part thereof with any piece or fraction thereof.

BY MR. KEMPF:

Q What you are saying then, you report that you are testifying to concerning this morning does not deal with specific markets within Illinois but rather only with the geographical boundaries established in 1818?

A On the state of Illinois.

MR. KEMPF: Thank you very much.

MR. CUSACK: It's not a geographical boundary there, political boundary.

MR. KEMPF: Political boundary, I'm sorry counsel.

* * * *

[3]

EXCERPT FROM DEPOSITION OF
WILLIAM L. KURTZ, TAKEN DECEMBER 12, 1968

PROCEEDINGS

Whereupon,

WILLIAM L. KURTZ

was called as a witness by Counsel for the Plaintiff, and, having first been duly sworn by the notary public, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. SIMS:

Q Would you state your name for the record, please?

A William Louis Kurtz.

Q Where do you reside Mr. Kurtz?

A 6435 Lee Highway, Arlington, Virginia.

Q Are you testifying under subpoena?

A Yes, I am.

Q How are you presently employed?

A I am manager of the Division of Economics and Statistics of the National Coal Association.

Q What is the National Coal Association?

A The National Coal Association is a trade association which represents primarily bituminous coal producers.

Q Do you have any idea what per cent of the coal producers are members of the National Coal Association?

A I do not know.

Q Is General Electric—strike that. Is United Electric Coal Company a member of the National Coal Association?

[4] A Yes.

Q Is Freeman Coal Company a member?

A Yes.

Q Is Frank Nugent an active director of the National Coal Association Board of Directors?

A Yes.

Q What is the function of the Division of Economics and Statistics?

A Our function is to gather, compile and disseminate economics and statistics data to serve our membership, the staff of NCA, and outside requests that come in from various parties.

Q Any particular class of statistics?

A We deal primarily in the fuel statistics area and related subjects to that.

Q What are your responsibilities as manager?

A To supervise the gathering, compilation and dissemination of the information I just described.

Q Who is your immediate superior?

A Thomas Howarth.

Q What is his title?

A Secretary Treasurer of the Association.

Q What size staff do you supervise?

A I have one economist, one statistical clerk, a statistical typist and a secretary.

[5] Q How long have you held the position of manager of the Division of Economics and Statistics?

A About three years.

Q How were you employed prior to occupying that position?

A I was still employed by the National Coal Association. Just prior to that I was Assistant Director of the Department of Economics and Transportation.

Q How long have you been employed by the National Coal Association?

A Since September, 1953.

Q Does the National Coal Association publish the Steam Electric Plant Factors Report?

A Yes.

Q Are you involved in any way in publication of this report?

A Yes. My primary responsibility is to produce the report.

Q How often is this report prepared?

A Once a year.

Q How many issues of the report have been published by the National Coal Association?

A There have been 18 editions.

Q What is the purpose of publishing this report?

A To disseminate information on the current fuel [6] consumption, generation and cost experience of the electric utilities.

.

[4]

EXCERPTS FROM DEPOSITION OF
MARTHA TERLEKE, TAKEN DECEMBER 16, 1968

* * * *

MR. HEDLUND: I think that the rules do provide for our receiving a copy of the subpoena. If you have not done so, would you, please?

MR. EISEN: Surely.

MR. KEMPF: I think the record should also show whether or not Miss Terleke is represented by counsel in these proceedings.

MR. BEEBE: Let the record show that Hamilton K. Beebe is present, representing the witness.

MR. EISEN: I understand that you are counsel for the Mid-West Coal Producers Association?

MR. BEEBE: That is correct.

MR. EISEN: Or Institute?

MR. BEEBE: The Mid-West Coal Producers Institute, Inc.

MR. EISEN: Thank you.

BY MR. EISEN:

Q Miss Terleke, you are employed by the Mid-West Coal Producers Institute, Inc.?

A Yes.

[5] Q What is your position?

A Corporate Secretary and Assistant Treasurer.

Q How long have you held that position?

A Since the company became activated, on October 11, 1958.

Q You mean, the Institute?

A Yes.

Q Since the Institute has been formed?

A Yes.

Q Do you hold any other positions?

A You mean with the Institute?

Q With the Institute or any other organizations.

A I am Assistant Secretary-Assistant Treasurer of the Illinois Coal Operators Association.

Q Did you have any previous experience in the coal industry?

A Well, I worked for some of the associations that became part of the Mid-West Coal Producers Institute, for about fourteen years—eleven years before Mid-West came into existence.

* * * *

[6] MR. EISEN: I will now ask our Court [7] Reporter, Mr. Youker, to mark as Terleke Deposition Exhibit No. 1, a one-page document entitled, "Certificate of Tonnage Produced", and ask that you look at that exhibit after it has been so marked.

(The document was thereupon marked Terleke Deposition Exhibit 1 for identification, 12-16-68.)

(There was a short interruption, after which the taking of the deposition was resumed as follows:)

BY THE WITNESS:

A I have read it.

BY MR. EISEN:

Q Will you tell us what this document is?

A That is one of our Certificates of Tonnage Produced report forms. It is a form that we mail to the member companies the last day of the month.

It has become an established fact over these years that they fill this out with the month's tonnage just preceding, and give us the days worked, the name of the mine, whether it is an underground or strip mine and the total production, and it is [8] signed by someone with a position of some standing.

Usually it is signed by someone in the Accounting Department, the Controller, sometimes the Treasurer or the Chief Accountant. It is signed and returned to us.

We use this for various purposes after we get it.

MR. EISEN: I am now going to ask Mr. Youker, our Court Reporter, to mark as Terleke Deposition Exhibits 2 through 11, ten three-page documents, each of which is entitled, "Report of Mine Performance—Month of . . .", and in the case of Terleke Deposition Exhibit No. 2 for identification, "December 1957 and 1958, and Accumulation—January through December, 1957 and 1958

for Illinois, Indiana and Western Kentucky, by Districts."

I am now going to ask the Reporter to mark the 1957-1958 report as Terleke Deposition Exhibit No. 2 for identification, the 1958-1959 report as Terleke Deposition Exhibit 3 for identification, the 1959-1960 report as Terleke Deposition Exhibit 4 for [9] identification, the 1960-1961 report as Terleke Deposition Exhibit 5 for identification, the 1961-1962 report as Terleke Deposition Exhibit 6 for identification, the 1962-1963 report as Terleke Deposition Exhibit 7 for identification, the 1963-1964 report as Terleke Deposition Exhibit 8 for identification, the 1964-1965 report as Terleke Deposition Exhibit 9 for identification, the 1965-1966 report as Terleke Deposition Exhibit 10 for identification and the 1966-1967 report as Terleke Deposition Exhibit 11 for identification, and after they have been marked, I will ask the Reporter to hand the documents to the witness.

I assume counsel have copies of these, so rather than go through and mark these one by one with the Reporter, which would have been more cumbersome, I have identified these en masse. Have you been able to mark these down as I have so identified them?

MR. KEMPF: We have.

(The documents were thereupon marked Terleke Deposition [10] Exhibits 2 through 11, inclusive for identification, 12-16-68.)

BY MR. EISEN:

Q Miss Terleke, now that you have these exhibits in your hands, could you tell us what responsibilities, if any, you have in preparing these documents?

A Well, these documents are prepared under my supervision. We get, whenever possible, the figures from this green sheet (indicating), the production sheet, which is returned to us by the member companies.

Q You were referring to Terleke Deposition Exhibit 1—

A That is right.

Q —when you referred to the green sheet?

A Yes. That is placed on a sheet in pencil form, and after we have received all of the green sheets and have

all of the figures except from those people listed on the later ones, who are no longer members of Mid-West, the figures are totaled and then the girl cuts a stencil on them and we check the stencil to make sure it is correct, and then we mail them to such people as we [11] have been requested to mail those reports to.

Q When you get the report, do you look at it first before you give it to her?

A Yes.

Q By "report", I mean the form.

A This form (indicating).

Q Yes.

A Oh, yes. I check the form. I get all of the forms. I check them to see whether there is anything that looks a little bit unusual, such as a new mine, or a mine might be omitted, perhaps, and then I check to find out whether it is no longer in operation, if they have not so specifically stated, which they most often do, and then I give it to the girl.

She again, if she finds anything that is a little doubtful in her mind, will question me on it, and if it is anything that requires a telephone call to the person who prepared or who signed the report, I contact them.

Q Do you proof read the figures—

A Yes.

Q —on the stencil?

A Yes.

[12] Q How do you do that? I mean, do you proof read them against the original report, or against the—

A Against the one in pencil form that we have prepared.

Q Who authorizes you, or who has authorized you to do this work?

A Well, this was requested by the members when we started. It was suggested that such a report be prepared and mailed.

Q By "the members", do you mean that there was some action taken by the board of directors of the Institute, or something of that sort?

A I cannot answer that. All I know is that that was back in 1957 or 1958, before Mid-West was activated, I

believe that was in about February, and we had a meeting at that time but I was not an officer of the corporation.

Mr. Christiansen was the Secretary, and he was the one who said they suggested it, and in his letter that he mailed out requesting that tonnages be sent in to the office every month, he stated that the action was taken at this meeting. It was suggested that such a report be prepared.

[13] Q Have you been doing this ever since that time?

A Yes.

Q Ever since you have been with Mid-West?

A Ever since the report was sent out, yes. That was the 1957-1958 report.

Q Do you send the form to any companies other than members of the Institute?

A No.

Q I believe you said that the report forms, the blank report forms, go out once a month?

A Yes. Some of the companies get enough for a year's supply, but in most instances one goes out every month.

Q Does the Institute have any members who are not located in the Mining Districts referred to in the monthly reports?

A (Shaking head "No.")

Q No?

A No.

MR. KEMPF: For the purposes of the record, counsel, what districts are those to which you are referring?

[14] MR. EISEN: The districts referred to in each report. I am referring now to Terleke Deposition Exhibit 2.

MR. KEMPF: Are you referring to the far left-hand column?

MR. EISEN: Well, let me ask the witness:

BY MR. EISEN:

Q With reference to Mining Districts 9, 10 and 11, are you familiar with those terms?

A Well, if they mean Illinois, Indiana and Western Kentucky, those are the only places we have members.

MR. EISEN: That is what my question was.

BY MR. EISEN:

Q Now, do you report any statistics in these reports which represent the production of companies who are not members?

A Yes. In Western Kentucky we have Pittsburgh & Midway and West Kentucky Coal Company. They at one time were members, but since they have dropped their membership, they still send in their tonnage either by phone or by mail, and want them included in the report.

[15] Q How do you get those figures?

A From West Kentucky Coal Company, they send in a sheet of paper with their tonnages on. Pittsburgh & Midway either phone them in, or I contact them and get them over the phone. It's a phone contact.

Q Referring again to Terleke Deposition Exhibits 2 through 11, could you tell us what these are in terms of what is represented on the sheets themselves?

A I do not understand what you mean. It is a monthly report. This is the December report that you have here in each instance.

They give the tonnages by months for the two years, the current year and the preceding year, and the accumulated figure for the same years, whatever years the report has on it, of the production of the companies' mines listed on the left-hand side.

Q So that this is the report for December but it also contains the annual figures, as you have indicated?

A Yes.

. . . .

[3]

**EXCERPTS FROM DEPOSITION OF
CHARLES W. STADELL,
TAKEN DECEMBER 16, 1968**

* * *

Q Mr. Stadell, could you please give us your educational background?

[4] A I had two years of college and am a graduate of John Marshall Law School. I have been admitted to the bar in Illinois and Indiana and before the United States Supreme Court.

Q Could you give us some of your general legal background, Mr. Stadell?

A Well, I have been employed in the coal industry since 1934. I was employed in August, 1934, by the Illinois Coal Traffic Bureau, which was an association composed primarily of companies operating coal mines in the Southern Illinois District, the DuQuoin District and the Belleville District, and I represented them in many cases before the Interstate Commerce Commission and the Federal Power Commission, involving the extension and expansion of natural gas pipelines before various state regulatory agencies.

Q By "districts", Mr. Stadell, you mean freight rate districts?

A That is correct.

Q How long were you with this Bureau, sir?

A Until October 1, 1958, when I came with the Mid-West Coal Producers Institute as commerce attorney.

[5] Q What other positions did you hold with the Mid-West Coal Producers Institute?

A That is the only position until July 1, 1965, when I was made Executive Vice-President, which is the position I have held since that time.

Q Mr. Stadell, could you tell us, please, when the Mid-West Coal Producers Institute was formed?

A It was in the formative stage, as Miss Terleke testified, in 1957, and actually began functioning and set up its offices here on October 1st, 1958.

Q Was the Mid-West Coal Producers Institute a successor to any other coal operators' association?

A There was a number of district or regional coal associations, among which was the Illinois Coal Traffic Bureau, the Northern Illinois Coal Trade Association, with which Mr. Christiansen, mentioned by Miss Terleke, was associated, the Northern Indiana Coal Traffic Association and the Kentucky Coal Traffic Association or Kentucky Coal Agency, which had as members the West Kentucky coal producers.

They in effect were merged into the Mid-West Coal Producers Institute, when it began functioning on October 1st, 1958.

Q All those associations?

A That is right.

Q Mr. Stadell, would you please tell us what the functions of the Mid-West Coal Producers Institute are?

A Well, it is to carry on all of the normal activities of a trade association.

We have various activities relating to land reclamation, water pollution, air pollution, we handle transportation matters for the member companies, we represent them in cases involving freight rates from their mines or from mines in competitive districts to various destination areas.

We have committees such as an Air Pollution Committee and Technical Advisory Committee on Air Pollution Control, which is composed of the combustion engineers of member companies that meets once a month or more to deal with regulations or ordinances proposed throughout the territory in which Mid-West coal may be marketed, that may affect the marketing of that coal.

[7] Q Do you also, Mr. Stadell, send to your member companies statistical information with regard to production?

A Yes, such as the information that was contained in the exhibits that Miss Terleke was questioned in connection with.

Q Mr. Stadell, could you please tell us who the present members of the Mid-West Coal Producers Institute are?

A Peabody Coal Company—I will try to get them all here.

Peabody Coal Company, Freeman Coal Mining Corporation, The United Electric Coal Companies, Ayrshire Collieries Corporation, Enos Coal Company, Old Ben Coal Corporation, Sahara Coal Company, Bell & Zoller Coal Company, Kirkpatrick Coal Company, Southwestern Illinois Coal Corporation, Pioneer Coal Company, Sherwood-Templeton Coal Company, Pioneer, which has a small mine in Illinois, Truax-Traer Division of Consolidation Coal Company. Did I mention Old Ben Coal Corporation?

Q Yes.

A I think I did mention it. I believe that is all.

.

[10] For example, to Beloit, Wisconsin or [11] Rockford, Illinois, all the mines in the Southern Illinois District were given the same freight rate by rail to that destination, so that when a new mine comes into operation, generally the first thing that is done is for the company to approach the railroads that are serving the mine and ask to be placed in a district, if it is within the boundaries of that district, for freight rate purposes.

Q Thank you, Mr. Stadell.

Where are the mines of the Members of the Midwest Coal Producers Institute located?

A They are located within the districts shown on the exhibits Miss Terleke was questioned about.

Q In what states are those mines located, sir?

A Illinois, Indiana and the western portion of Kentucky that is generally referred to as the Western Kentucky Group.

Q Can you tell us, Mr. Stadell, if these areas have any numerical name or are assigned any numerical designation as a mining district?

A Well, they are as shown on the production statement that Miss Terleke was questioned about. For example, they are the Fulton County District, [12] the Central Illinois District, the Danville, Illinois District, the Belleville, Illinois District, the Southern Illinois District, and then there are four districts of Indiana and Western Kentucky.

Q Other than freight rate districts as set out in the report, can you tell us what mining districts are included in Illinois? Is Illinois a particular Mining District?

A Well, it is generally referred to as District No. 10, yes, West Kentucky is No. 9 and Indiana is No. 11.

Q Are all the mines in Indiana, Western Kentucky and Illinois located in Mining Districts 9, 10 and 11?

A That is correct.

Q Do some of your members have mines outside of Mining Districts 9, 10 and 11?

A Yes. Some of them do. Some of them have mines in—Peabody has a mine in Ohio, and I think they have a mine in East Kentucky, but the production of those mines is not included in the Mid-West. We have nothing to do with it.

Q I see.

[13] A Some of them have mines in Colorado.

Q Mr. Stadell, based on your knowledge and experience in the industry, is there a particular name given for the coal mines located within Mining Districts 9, 10 and 11?

A Well, again the Interstate Commerce Commission for many years has generally referred to that area as the Midwestern Coal District, or the Midwestern Coal Producing Area, and the Midwestern mines.

Q Does this constitute an integrated coal field, in your opinion?

MR. KEMPF: I object to that. What is an integrated coal field? I think it would be helpful to the witness if you defined it.

BY MR. CUSACK:

Q Does this constitute a coal field, in your opinion, Mining Districts 9, 10 and 11?

A It is generally referred to, as I say, as the Midwestern coal field.

Q Mr. Stadell, with reference to mines located in Missouri and in Arkansas, what coal field, if any, are they located in?

A Mines in Missouri, Kansas, Arkansas and [14]

Oklahoma are generally referred to as the Southwestern coal field.

[30] Q This map shows the distribution of coal produced in Illinois, Indiana and Western Kentucky; [31] that is correct, is it not, sir?

A Yes.

Q Directing your attention, sir, to this map, could you tell us the areas in the United States where the total coal consumed is produced in Mining Districts 9, 10 and 11?

MR. HEDLUND: I am a little confused by your question, counsel. Will you read the question, please, Mr. Youker?

Q (Read by the Reporter.)

BY MR. CUSACK:

Q Do you understand the question, Mr. Stadwell?

A I do not believe I do. I do not believe I do. What you are asking, in effect, is which of these areas consumes only coal produced by the Midwestern mines?

Q Not "only", but where does it predominate? For example, in what areas of the country would 75 per cent, as a figure, of the coal consumed be coal which is produced in Mining District 9, 10 and 11?

A Well, with respect to Illinois, Indiana and Eastern Iowa, possibly 65 to 70 per cent of the coal consumed in Minnesota and Wisconsin would be produced by Midwestern mines.

[32] Q What about Missouri? Do you know whether any Midwestern coal goes into Missouri?

A Yes. There is Midwestern coal that goes in there from Southern Illinois and the Belleville-DuQuoin, Illinois Districts.

I do not believe there is very much—there is no Indiana coal that goes into Missouri and not too much Western Kentucky coal.

Q What portion of Missouri would this coal go into?

A Approximately the southeastern portion, because in the western portion or the northern portion, it is coal primarily produced by Missouri mines.

Q What about Kentucky, Mr. Stadell? Does any coal produced in Mining Districts 9, 10 and 11 go into Kentucky?

A Virtually no Indiana coal and very little Illinois coal, except for a TVA plant at Childs, Kentucky; it would be predominantly Western Kentucky and eastern coal, Appalachian coal, in Kentucky.

Q Do you know whether much eastern coal goes into Western Kentucky?

[33] A I do not believe so. I do not believe very much eastern coal goes into Western Kentucky.

Q What about Tennessee, Mr. Stadell? Does any coal produced in Mining Districts 9, 10 and 11 end up in Tennessee?

A Quite a lot of the Western Kentucky coal would move to the TVA plants and some Illinois coal.

Q Into what portions of Tennessee, if any, would this coal move?

A Well, I think it would be primarily the western portion.

Q Would you say with respect to the total coal consumed in western Tennessee that at least 75 per cent of it was produced in Western Kentucky and in Illinois?

A I would hesitate to make that assumption without having an opportunity to check the figures.

Q Do you think it would be at least over 50 per cent?

A I would imagine it would be about that.

Q Mr. Stadell, do you know whether any coal produced in Indiana moves into the extreme eastern portion of Indiana?

A Some does, yes.

[34] Q What would be the area in Minnesota where coal produced in Mining Districts 9, 10 and all has the greatest share of the market?

A It would be along the Mississippi River. It moves by rail-barge up the Mississippi River.

Q Would that be in southeastern Minnesota, then?

A That would be up around the St. Paul-Minneapolis area. There is a big electric utility plant at Black Dog, Minnesota, that receives its coal by barge.

Q Is it a fair statement to say, Mr. Stadell, that the coal consumed in the eastern half of Iowa is produced in Mining Districts 9, 10 and 11?

A Yes. I would think that most of it would be from Illinois and Western Kentucky. There may be some Indiana coal out there.

Q You know, don't you, that some Indiana coal moves from Indiana by rail into northern Illinois?

A Yes.

.

[36] MR. CUSACK: I am not going to even dignify that objection by a response. Mr. Stadell has testified that he has spent thirty-four years in the coal industry in regard to freight traffic matters. Apparently you do not recall that.

MR. KEMPF: I am sorry, counsel, but I do not consider that as having established a foundation to answer a line of inquiry such as you have just begun. I continue my objection.

BY MR. CUSACK:

Q Mr. Stadell, would you tell us, please, the freight rate districts which, in your opinion, and based on your knowledge and experience, can or do or have served the Chicago Metropolitan Area?

A I think most of the Midwestern Districts shown on the production statement that Miss Terleke was questioned about ship or have shipped into the Chicago area.

Q Thank you.

A Some of them ship, of course, by rail, some of them by barge and some rail-barge.

.

[3]

**EXCERPTS FROM DEPOSITION OF
HAROLD K. PEDERSEN,
TAKEN DECEMBER 18, 1968**

. . . .
HAROLD K. PEDERSEN,

called as a witness by the Plaintiff herein, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. CUSACK:

Q Please state your full name.

A Harold K. Pedersen.

Q What is your home address?

A 14 Darbrook Road, Westport, Connecticut.

Q What is your present position?

A Treasurer of General Dynamics Corporation.

Q In New York City?

A New York City.

Q What is your educational background, Mr. Pedersen?

A Graduate of St. Johns University, Bachelor of Business Administration.

. . . .

[74] **Q** At the Continental, Chase, American National, Commercial National, Providence State Bank, totaling \$4,670,000, is that correct sir?

[75] **A** That's correct.

MR. HEDLUND: \$4,675,000.

MR. CUSACK: \$4,675,000, yes.

BY MR. CUSACK:

Q There was cash of \$1,295,000, is that correct, sir?

A That's correct.

Q For total cash of \$5,970,000, is that correct?

A That's correct.

MR. HEDLUND: You mean total cash and C. of D.'s?

MR. CUSACK: Yes.

BY MR. CUSACK:

Q Of \$5,970,000?

A That is correct.

Q Do you know why, Mr. Pedersen, United Electric was accumulating cash in 1964, 1965 and 1966?

MR. HEDLUND: I think you had better first ask him whether or not they were before you ask him why, if he knows.

BY MR. CUSACK:

Q You know, do you not, Mr. Pedersen, [76] that United Electric was accumulating cash in 1964, 1965, 1966 and 1967?

A I know that during this period they were accumulating cash in excess of their normal operating requirements, yes.

Q And investing this cash in C. of D.'s?

A Investing it in certificates of deposit.

Q Do you know why United Electric was accumulating this cash?

A For what purpose?

Q Yes.

A No.

Q Is it not a fact, Mr. Pedersen, that the management of General Dynamics instructed United Electric to accumulate cash in 1964, 1965 and 1966?

A I don't know that to be a fact.

Q Do you deny that it is a fact?

A I don't know it to be a fact.

Q Have you ever heard, Mr. Pedersen, that United Electric was instructed by General Dynamics to accumulate cash in 1964, 1965 and 1966?

A No, I have not heard such a statement.

Q It is a fact, however, is it not, that [77] after United Electric was acquired by General Dynamics, its accumulated cash was transferred by way of a dividend from United Electric to General Dynamics?

A Cash at that point in time was declared as a dividend, yes.

Q Six million dollars?

A Correct.

Q Mr. Pedersen, I show you Nugent Deposition Exhibit 31, a 1965 annual report of United Electric, and direct your attention to Page 8 which sets forth the assets of United Electric as of December 31, 1964 and 1965.

I show you there, sir, that the cash entry here states that United Electric had cash as of December 31, 1965 of \$1,766,245, is that correct, sir?

A That's correct.

Q United Electric had bank certificates of deposit of \$3,675,000, is that correct, sir?

A That's correct.

* * *

[95] Q Is it a fact, sir, that on or about December 22nd, 1966, United Electric loaned General Dynamics one million dollars?

MR. HEDLUND: May I have that question back, please?

MR. CUSACK: I would be happy to state it again.

MR. HEDLUND: Either way.

BY THE WITNESS:

A Did you say September 22nd?

BY MR. CUSACK:

Q I meant to say on or about September 22nd, 1966, is it not a fact that United Electric loaned General Dynamics one million dollars?

A That's correct.

Q Is it not a fact, Mr. Pedersen, that on or about October 31, 1966, United Electric loaned General Dynamics one million dollars?

A That's correct.

Q Do you recall what interest these notes would carry?

A I believe they were six percent notes.

Q Was that the prime or going rate at that [96] time?

A It was either prime or perhaps a quarter over.

MR. HEDLUND: I am sorry. May I have that question and answer back, please?

Did you ask him if that was the prime rate at the present time or at that time?

MR. CUSACK: At that time.

BY THE WITNESS:

A At those times.

BY MR. CUSACK:

Q Can you tell us, Mr. Pedersen, why General Dynamics borrowed two million dollars from United Electric in September and October of 1966?

A General Dynamics was borrowing from the banks at that time and since United Electric Coal had excess cash at that point, it was desirable to borrow from the subsidiary.

Q You know, do you not, that on September 22nd, 1966, United Electric was not a subsidiary of General Dynamics?

A Yes, it was, but it was not a wholly owned subsidiary.

.

[101] MR. CUSACK: Would you please mark as [102] Pedersen Deposition Exhibit 12 a letter from Mr. Alderson to Mr. Culverwell dated May 17, 1967.

(The document was thereupon marked Plaintiff's Pederson Deposition Exhibit 12 for identification, 12-18-68).

MR. CUSACK: Thank you.

Counsel, does the standing stipulation apply to Pedersen Deposition Exhibits 7 through 12, inclusive?

MR. HEDLUND: It does.

MR. CUSACK: Thank you.

BY MR. CUSACK:

Q Mr. Pedersen, in the fall of 1966 and in the winter and spring of 1967, did you direct United Electric to transfer funds from the accounts of United Electric to

the Chase Manhattan Bank to pay for the stock involved in the General Dynamics tender?

MR. HEDLUND: May I have that question back, please.

Q (Read by the reporter.)

MR. HEDLUND: I think that is a rather [103] confusing question, Mr. Cusack. I am not certain that I quite understand it. I think you are asking two questions at the same time.

Also, I think the word "fall" is somewhat ambiguous in the context of the exhibits we just stipulated to and which you have marked.

MR. CUSACK: All right. We will go over the exhibits one by one.

BY MR. CUSACK:

Q Mr. Pedersen, I now hand you what has been marked as Pedersen Deposition Exhibit 7, which is a letter from Mr. Alderson to Mr. Culverwell.

I note, sir, that this letter states:

"As per your request through Mr. H. K. Pedersen's office in New York, we are enclosing herewith our check in the amount of \$250,000.00 to be used for reimbursement of United Electric common stock to stockholders in connection with General Dynamics tender dated October 5, 1966."

[104] Is that what it says, Mr. Pedersen?

A That's correct.

Q Mr. Pedersen, on or about November 28th, 1966, did you direct United Electric to transfer \$250,000 from United Electric to the Chase to pay for a portion of the stock tendered by the General Dynamics tender offer for the stock of United Electric?

MR. HEDLUND: May I have that question back, please?

Q (Read by the reporter.)

MR. HEDLUND: That is a hopelessly worded question. If the witness understands what you are getting at, he may answer.

MR. CUSACK: I do not think it is hopelessly worded; I think it is perfectly clear, and I ask the witness to answer it.

BY THE WITNESS:

A Yes, I did direct them to transfer these funds to the Chase for the purchase of common stock.

BY MR. CUSACK:

Q Of United Electric?

A United Electric.

[105] Q By General Dynamics?

A By General Dynamics.

Q Incidentally, this letter from Mr. Alderson to Mr. Culverwell is accurate, is it not?

A That's correct.

Q I direct your attention, sir, to Pedersen Deposition Exhibit 8, which is Mr. Alderson's letter to Mr. Culverwell of January 3, 1967, and I ask you whether or not it is a fact that on or about January 3, 1967, you directed United Electric to transfer \$100,000 of the funds of United Electric to the Chase for the payment to common shareholders of United Electric for the General Dynamics tender?

A That is correct.

Q Is that letter, Pedersen Deposition Exhibit 8, accurate, sir?

A Yes.

Q I direct your attention, sir, to Pedersen Deposition Exhibit 9, and I ask you if it is a fact that on or about January 6, 1967, you directed United Electric to transfer \$200,000 of its funds to the Chase to pay for the shares [106] tendered in United Electric as a result of the General Dynamics tender?

A Yes.

Q Is this letter, Pedersen Deposition Exhibit 9, accurate, sir?

A No, in the sense that I think the shares were not tendered at the proper date. These were shares that came in later after the tender date. That is the only correction.

Q It was after the expiration of the tender?

A The tender date was November 4, I believe. I'm not sure. But, this is substantially correct.

MR. CUSACK: Will counsel stipulate that the General Dynamics tender was extended beyond November 4?

MR. HEDLUND: I will stipulate that the tender expired prior to November 28, 1966.

BY THE WITNESS:

A (Continuing) It is my recollection that these transfers were to take care of shares that were offered after the tender date.

[107] BY MR. CUSACK:

Q However, they were shares of United Electric?

A That's correct.

Q Tendered to General Dynamics?

A That's correct.

Q Mr. Pedersen, I show you Pedersen Deposition Exhibit 10, Mr. Alderson's letter to Mr. Culverwell dated March 21, 1967, and I ask you, sir, if it is a fact that on or about March 21, 1967, you directed United Electric to transfer \$100,000 to the Chase for the payment of United Electric shares tendered to General Dynamics?

A That's correct.

Q Is this letter, Pedersen Deposition Exhibit 10, accurate, sir?

A Yes.

Q I show you, sir, what is Pedersen Deposition Exhibit 11, Mr. Alderson's letter to Mr. Culverwell of April 7, 1967, and I ask you, sir, if it is a fact that on or about April 7, 1967, you directed United Electric to transfer \$150,000 of its funds to the Chase for the reimbursement of United Electric shareholders in [108] connection with the General Dynamics tender offer.

A That is correct.

Q Sir, is Pedersen Deposition Exhibit 11 accurate?

A Yes.

Q Mr. Pedersen, I show you what has been marked as Pedersen Deposition Exhibit 12 which is Mr. Alderson's letter to Mr. Culverwell of May 17, 1967, and I ask

you, sir, if it is a fact that on or about May 17, 1967, you directed United Electric to transfer \$100,000 of its funds to the Chase to be used for reimbursement of United Electric common stock to the United Electric stockholders in connection with the General Dynamics tender offer dated October 5, 1966.

A That's correct.

Q Mr. Pedersen, is Pedersen Deposition Exhibit 12 accurate?

A Yes.

Q If my addition is correct, Mr. Pedersen, this means that United Electric, from November 28, 1966 to May 17, 1967, transferred \$900,000 to the Chase for payment of the United Electric shareholders as a result of the tender offer.

[109] A That is correct.

Q Do you know, Mr. Pedersen, whether there was any more money transferred from United Electric to the Chase for the payment of the United Electric shareholders as a result of the tender offer?

A I am not certain, but I believe there were other transactions.

Q It would be, then, over \$900,000, would it not?

A I believe so.

Q Do you know how much more it was?

A No, I don't know offhand.

Q We have records from Mr. Alderson's internal records of United Electric indicating that it was one million dollars. Do you know if it was over a million?

A It was in that approximate area, a million two, a million three.

Q It would not be over a million three?

A I don't believe so.

. . . .

[3]

EXCERPT FROM DEPOSITION OF
JOHN P. MAGUIRE, TAKEN DECEMBER 23, 1968

* * * *

JOHN P. MAGUIRE,

called as a witness by the plaintiff herein, having been by me, the said Claude W. Youker, Jr., as Notary Public aforesaid first duly sworn, was examined upon oral interrogatories and he did thereupon depose and testify as follows:

DIRECT EXAMINATION

BY MR. CUSACK:

Q Please state your full name.

A John P. Maguire.

Q What is your home address, Mr. Maguire?

A Merry Meeting Lane, Huntington, New York.

Q What is your present position?

A I am Secretary of General Dynamics Corporation.

Q Are you also Secretary of any subsidiaries of General Dynamics?

A I am Secretary, generally speaking, of all subsidiaries of General Dynamics.

* * * *

[4]

EXCERPTS FROM DEPOSITION OF B.H. SLOANE,
TAKEN MARCH 7, 1969

.
DIRECT EXAMINATION

BY MR. HEDLUND:

Q Would you please state your name, sir.

A B. H. Sloane.

Q Would you please state your employment and the position that you hold?

A I am a vice-president of the Aluminum Company of America, in charge of raw materials, refining and smelting.

Q Are you a resident of Pittsburgh, Pennsylvania?

A No; Rosslyn Farms, which is a Carnegie address.

Q Mr. Sloane, would you briefly summarize for me your education and employment experience prior to becoming an employee of Alcoa?

A I am a graduate of the Georgia School of Technology, Class of 1930, in civil engineering. I have been employed by Alcoa since June 15th, 1930.

Q Again very briefly, would you summarize your employment experience with Alcoa from, say, 1930 to 1940?

A From 1930 until 1940 I was employed as a [5] technician, foreman and general foreman in the Alcoa, Tennessee plant.

Q And then from 1940 to 1950, sir?

A Beginning in 1940 I was the aluminum plant superintendent at the Vancouver Works.

In 1942, aluminum plant superintendent in the DPC plant at Troutdale, Oregon. In October of the same year I was the production manager of the DPC plant in Queens, Long Island.

In 1944, Production manager of the DPC plant in Jones Mill, Arkansas.

On January 1, 1945, production manager of the aluminum plant in Vancouver, Washington.

February 1, 1952, Works Manager, Point Comfort plant, in Point Comfort, Texas.

In 1956, operations manager, Point Comfort operations. 1960—you just wanted me to go through 1950, didn't you?

Q From 1956, then to 1960 you were operations manager at Point Comfort?

A Point Comfort Works, yes.

Q Then would you bring us up to date, sir, since 1960?

[6] A 1960, general manager, Smelting Division, in 1965, vice-president in charge of smelting and refining, and in 1966 raw materials was added.

Q Would you please briefly describe the functions of your position as vice-president of smelting, refining and raw materials.

A The vice-president of these divisions is responsible for the production of the raw materials, their refining into usable ores and other products and the smelting of these ores into metal, the production of power for the purpose of smelting and the final casting of metal into ingot forms that are used for either sales or fabrication.

Q To whom do you report directly?

A To the executive vice-president of the Primary and Allied Products Division.

Q What is his name, sir, please?

A J. M. Mitchell.

Q Are you familiar with the coal reserves that are presently controlled by Alcoa?

A Yes.

Q Where are these located?

A The coal reserves are in southern Indiana, near Evansville, Boonville, in Sturgis, Kentucky in [7] Union County and Crittenden County, and in Illinois, near Pinckneyville.

Q Do you recall what county Pinckneyville is in?

A Not offhand. It is on the map here.

Q May I suggest that it is in Perry County.

MR. CUSACK: We will so stipulate.

BY THE WITNESS:

Q It is in Perry County.

BY MR. HEDLUND:

Q Have you now listed all of the coal reserves?

A Coal, yes. You did not ask about lignite.

Q No.

A We have lignite reserves as well.

Q Where are the lignite reserves?

A They are in Milam and Robertson Counties, Texas.

Q Does Alcoa also control any other form of energy which it uses to generate power at its smelting plants?

A Yes; gas and oil reserves in Calhoun, Matagorda and Jackson Counties, Texas.

Q Any other reserves of energy in any other [8] location that the company is presently using as a fuel to generate power?

A We have some isolated reserves of gas and oil in other counties in Texas but they are minor by comparison.

Q Now, Mr. Sloane, with respect to the reserves in southern Indiana, which I will refer to, if I may, as the Warrick reserves, are these strip reserves or deep reserves?

MR. CUSACK: The Government objects to your characterization of those reserves as the Warrick reserves. I believe he testified that they were the Evansville and Boonville reserves. I object to that, unless you want to ask him if they can be referred to in that way.

BY THE WITNESS:

A It is Warrick County.

MR. CUSACK: It is Warrick County?

BY THE WITNESS:

A Yes.

MR. CUSACK: Thank you. I will withdraw my objection.

BY THE WITNESS:

A Those are both strip and deep, strip predominating.

[9] BY MR. HEDLUND:

Q Do you know approximately how many tons of strip reserves are present in the field?

A Approximately 200,000,000 tons.

Q Are these all owned or otherwise controlled by Alcoa?

A Yes.

Q Are these reserves presently being mined?

A Yes.

Q Are they being mined by Alcoa?

A No.

Q Are they being mined by a coal producer?

A They are being mined by a coal producer in a partnership arrangement.

Q Approximately how many tons a year are being mined out of the Warrick County reserves?

A About a million and a half tons per year, at the present rate. It will be stepped up as early as our next generating unit is available to approximately two million tons a year.

Q For what purpose is the coal being mined in Warrick County being used by Alcoa?

A Totally for the generation of electricity by the Alcoa Generating Corporation.

[10] Q Can you tell me approximately the kilowatt output or capacity of the generating station there?

A We have three units of 150 megawatts each.

Q Are you presently utilizing coal in these generating units other than the coal being mined in Warrick County?

A No.

Q With reference to your plant at Warrick, is it proper to refer to that as a smelting facility or is it both smelting and refining?

A No. It is a joint enterprise using both smelting and fabricating facilities and power-generating facilities. In our terminology, it is joint operations.

Q Do these facilities use coal for any purpose other than power generation?

A Yes.

Q For what purposes is that coal used?

A Steam for heat.

Q Any other purpose?

A No.

Q Is there any—

A Wait a minute. We do sell some of the power generated there under a provision of a contract with [11] the Southern Indiana Gas & Electric Company in return for backup for these units when they are out of service.

Q For the purposes you have just mentioned, again does all of that coal come from mining operations of yours?

A Yes.

Q That is, of the coal producers in Warrick County?

A Yes.

Q Do you use any coal at all in your facilities in Warrick County for processing or processing heat?

A No—for heat, yes, but not for processing.

Q Do you have separate equipment that produces the steam for heating purposes as opposed to producing steam for generating power?

A No. It is bled off the boiler.

Q With respect to the coal that you own and control in Sturgis, Kentucky, is that deep coal or strip coal or both?

A Deep.

Q Approximately how many tons of reserve do you own or control there?

[12] A Around 150 million tons.

Q Is all of that coal either owned or otherwise controlled by Alcoa?

A Yes.

Q Is that coal presently being mined?

A No.

Q With respect to the coal that you own or control in Illinois, near Pinckneyville, what is the name of this field that you use?

A Beaucoup.

Q Approximately how many tons of coal are in the Beaucoup field?

A 160 million of recoverable tons, as mined.

Q Is this strip coal or deep coal?

A Deep.

Q Did you acquire this coal directly or through the offices of another company?

A Through the offices of another company.

Q Which company was that?

A United Electric Coal Companies.

Q Were you involved in the original negotiations or the decision to acquire the Beaucoup Field reserves?

[13] A No.

Q Who was involved in that, if you recall?

A Lawrence Litchfield, George Streepey, and Roy Miller.

Q Is Mr. Litchfield alive?

A No.

Q Is Mr. Streepey alive?

A No.

Q Do you know the present whereabouts of Mr. Miller?

A He is in Florida, but I do not know where.

Q Is he still an employee of Alcoa?

A No. He is retired.

Q Could you tell me generally, if you know, why Alcoa acquired and continues to own coal reserves in the Midwest?

A For the expansion of the aluminum industry's power requirements, there being an inadequate amount of hydropower that could be developed.

Q Does Alcoa purchase a substantial amount of power?

A Yes.

Q Approximately what percent, if you know?

[14] A About 45 percent—correction, and off the record.

MR. HEDLUND: All right.

(There was discussion off the record, after which the taking of the deposition was resumed, as follows:)

MR. HEDLUND: Back on the record.

BY MR. HEDLUND:

Q When I asked you how much power or what percentage of the power consumed by Alcoa was purchased, I was referring to purchased from independent utilities.

A About 45 percent.

MR. CUSACK: And 55 percent is from your own generating stations?

BY THE WITNESS:

A From our own generation.

MR. CUSACK: Thank you.

BY MR. HEDLUND:

Q Does this percentage hold true with respect to your facilities in Warrick?

A No. All of the power purchased for Warrick comes from our own subsidiary with, again, the exception of backup power when one unit is out, [15] which is an exchange arrangement with Southern Indiana Gas and Electric, occasional emergency supplies, when we have a unit out. We have to buy some to hold over until we get the unit back into operation.

Q Mr. Sloane, I would like to show you now what has been marked in a previous deposition in this case as Morris Deposition Exhibit 61, and ask if you could describe this document for the record.

A Yes, sir. This is an agreement between the Aluminum Company of America and the United Electric Coal Companies concerning property in Perry County, Illinois.

It is the second such contract, embodying not only the principles of the original, but side letters of three dates between the signing of the original and the final document. It contains all of the agreement between United Electric and Alcoa.

Q Can you tell what the effective date of Morris Deposition Exhibit 61 is?

A The 3rd day of May, 1965.

Q Are you aware of any subsequent modification, amendment or cancellation of this agreement?

[16] A No.

Q Are you aware of any rights that UEC, that is, United Electric, has or any commitments by Alcoa to UEC, other than are spelled out in that agreement?

A No. This composes the complete and total agreement between the two.

Q With respect to the coal reserves in the Beaucoup Field, if Alcoa wishes to sell, lease or assign its coal rights in that field to another party, must it first offer those rights to UEC?

A No.

Q Now, Mr. Sloane, I would like to show you what has been marked in a previous deposition as Morris Deposition Exhibit 59, which is a letter from Gene Utterback of the United Electric Coal Companies to Mr. Robert S. Overbeck, General Manager of Alcoa.

A Yes.

Q I would first like to ask you if Mr. Overbeck is living.

A Yes.

Q Is he still an employee of Alcoa?

A Yes.

[17] Q Where is he located?

A Pittsburgh.

Q At or about the time that this letter was written, that is, November 29, 1962, did you have an occasion to see this letter?

A I have no recollection of having seen this letter, no.

Q Have you, since November 29, 1962, had an occasion to review this letter or to see this letter, other than in the course of the last 30 to 60 days?

A No.

Q Directing your attention to the second paragraph of this letter, it refers to a meeting on September 1, 1960, at which you are stated in the letter to have been present. Do you recall that meeting?

A Yes.

Q Do you recall that the meeting was attended by the people stated in this letter?

A Yes.

Q I would like to direct your attention to the paragraph of Morris Deposition Exhibit 59 which is lettered

(a), and I would like to know whether [18] you recall whether agreement was reached at this meeting on September 1, 1960, as described in Paragraph (a) of that letter.

A No agreement was reached in this connection.

Q Now I would like to hand you what has been marked in a previous deposition as Morris Deposition Exhibit 60, which is a letter dated December 13, 1962, from Mr. Overbeck of Alcoa to Mr. Utterback of The United Electric Coal Companies.

A Yes.

Q Do you recall whether or not you reviewed this letter or a draft of it at or about the date of its being written?

A I did not review it. I received no copy of it.

Q Do you recall discussing the contents of this letter around that time, that is, December 13, 1962, with Mr. Overbeck?

A No.

Q Directing your attention to the paragraph designated as (b), do you know or are you aware, rather, of any proposal that has ever been submitted to Alcoa by UEC as described in that [19] Paragraph (b)?

A No. There has not been one, to my knowledge, at any rate.

Q Directing your attention to the first full paragraph on Page 2 of Morris Deposition Exhibit 60, are you aware of any proposal that has been submitted in the past by UEC to Alcoa, as suggested by that paragraph?

A You refer to Paragraph (a)?

Q No, sir. I am referring to the first paragraph on the second page.

MR. CUSACK: Mr. Hedlund, I suggest that you show him Morris Deposition Exhibit 59, so he can refer to both paragraphs.

MR. HEDLUND: I will be happy to do that.

MR. CUSACK: There is a reference there.

MR. HEDLUND: There is a reference in that Paragraph 2—

MR. CUSACK: The paragraph at the top of Page 2 of Morris Deposition Exhibit 60 refers to the second to the last paragraph in Morris Deposition Exhibit 59.

[20] BY THE WITNESS:

A No definite proposal of such a nature has been made to Alcoa.

BY MR. HEDLUND:

Q Since that letter—

A Since the letter.

Q —and up to the present time?

A That is right.

MR. HEDLUND: Mr. Youker, would you mark this document as Sloane Deposition Exhibit 1 for identification, please.

(The document was thereupon marked Defendants' Sloane Deposition Exhibit 1 for identification, 3-7-69.)

BY MR. HEDLUND:

Q I now hand you, Mr. Sloane, what has been marked as Sloane Deposition Exhibit 1 for identification, which is a copy of a letter dated January 21, 1963, from Gene Utterback of United Electric to Mr. Robert S. Overbeck of Alcoa, and I ask you whether you have ever seen this letter before, that is, prior to the last 60 days or so.

A Not prior to the last 60 days, no.

[21] Q Since 60 days ago, have you had an opportunity to determine whether the original of this letter is in the files of Alcoa—

A No.

Q —and was in fact received?

A I have no—that same letter?

Q Yes.

A Yes. Such a letter is in the files.

Q And such a letter was received by Alcoa?

A Yes.

MR. CUSACK: Excuse me, please. Off the record.

(There was discussion off the record, after which the taking of the deposition was resumed, as follows:)

MR. HEDLUND: Back on the record.

BY MR. HEDLUND:

Q Is Sloane Deposition Exhibit 1 for identification a direct copy of the original of that letter as it appears in the files of Alcoa?

A Yes.

Q Has Alcoa made a decision as to whether they will utilize the coal in the Beaucoup Field?

A You will have to define that a little bit [22] better. Do you mean, do we now have a decision as to time and date and so forth?

Q Yes. That is what I mean.

A We do not have it formalized to that degree.

Q At such time as Alcoa decides to utilize the Beaucoup Field reserves, if in fact it does decide to do so, what priorities, if any, will The United Electric Coal Companies be given in submitting a proposal to mine the coal?

A They have no priorities.

Q I would like to ask you, Mr. Sloane, if you agree or disagree with the following statement:

"Alcoa will call upon UEC to mine Beaucoup for it, they just naturally will."

Do you agree or disagree?

A I disagree.

MR. CUSACK: The Government objects. Mr. Hedlund is reading a portion of the Kolbe deposition transcript out of context.

MR. HEDLUND: I am not at all.

MR. CUSACK: It is not fair to the [23] witness.

MR. HEDLUND: Mr. Cusack, if you can find where that sentence appears in that form in Mr. Kolbe's deposition—

MR. CUSACK: It is awfully close, Mr. Hedlund.

MR. HEDLUND: Yes, indeed it is.

MR. CUSACK: But it is not complete.

MR. HEDLUND: Did we have an answer to that question, Mr. Youker?

A (Read by the reporter.)

THE WITNESS: I got that out before the objection was stated.

BY MR. HEDLUND:

Q Why do you disagree with that, sir?

A (Addressing Mr. Kattila) Are we still looking at the objection situation—

Q No.

A —or are we through with that?

MR. KATTILA: We are through with that.

BY THE WITNESS:

A We would, of course, ask United Electric and other coal companies for a bid on the mining of coal in that particular area, and would select [24] the best qualified and lowest bidder.

BY MR. HEDLUND:

Q At such time as Alcoa decides to utilize the Beau-coup field reserves, if such a decision is made, what factors other than price will govern its selection of the company chosen to mine the field?

A The competence of the company that submits the bid, and by "competence", I mean their overall experience in underground mining, their technical abilities as to the handling of a deep mining situation at low cost, and the ability of the company to recruit and maintain a working force adequate to do the job.

There may be other considerations, but those are the primary ones.

Q At such time as Alcoa decides to utilize the Beau-coup Field reserves, if it makes such a decision, would you recommend entering into a contract with a company whose bid price was low but who had no prior experience in deep mining and had no organization, knowhow or equipment necessary for deep mining?

A Certainly not.

[25] Q Will you tell me why not?

A Well, the mining of coal, regardless of whether it is strip or deep, is an art and a technology requiring a great deal of experience in both the handling of the equipment, the labor and the technical aspects of the problem.

If we were to depend upon an organization having none of these things, we might just as well do it ourselves and save the fee, being equally inexperienced, I would say.

Q In your opinion, would a company whose prior experience, organization and know-how had been devoted exclusively to strip mining have the requisite competence, in your judgment, to undertake deep mining?

A No.

Q Why is that?

A The two things are entirely different in their approach to the problem. Your strip mining equipment, overburden and so forth, is entirely different from your underground mining. Your recoveries are somewhat less and your machinery and equipment are entirely different.

The two know-hows are not necessarily in [26] the same field. For example, we have a great deal of know-how in strip mining, not of coal but of other materials, but no backlog of know-how at all in deep mining.

Q Are you aware of any proposal made at any time in the past by Alcoa to United Electric that Alcoa turn over any substantial amount of Beaucoup Field reserves to UEC?

Q You mean, did we make any proposal to them or did they make any proposal to us?

Q No. Did you make any proposals to United Electric?

A Not to my knowledge.

Q Do you know why Alcoa decided to utilize the coal reserves at Warrick rather than the coal reserves in the Beaucoup Field, at the time that the Warrick Reserves were opened?

A We considered that the strip mining would be less expensive and that the location of the plant, because of the town of Evansville being adjacent, would furnish

us with a substantial amount of skilled labor that would not be available in the Illinois area.

MR. HEDLUND: That is all I have.

.

[42] Q Is it a fair statement to say, Mr. Sloane, that Alcoa would plan to use the coal in the Beaucoup Field by the late 1970's?

A It is possible, I would say even probable.

Q I understand. Could you tell us where or in what manner Alcoa would use this coal in the probability of employing the coal in the Beaucoup Field? Would there be a smelter?

A It would be used on a smelting plant, yes.

Q Would it be for electrical generation for a smelting plant?

A Electrical generation for a smelting plant, not necessarily located adjacent to the coal field.

Q But in the general area?

A In the area, yes.

Q This is ordinary steam coal, is it not, sir?

A Right.

Q Mr. Sloane, directing your attention to Morris Deposition Exhibit 60, which is a letter from Mr. Overbeck to Mr. Utterback of December 13, [43] 1962, I ask you, sir: What chance does United Electric have to mine the Beaucoup Field in the eyes of Alcoa?

A Do you mean to say by that, good, poor or excellent, that kind of an answer?

Q Well, would it be fair to say that Alcoa will give United Electric serious consideration for United Electric's mining the Beaucoup Field reserves?

A Yes. We will give them serious consideration.

Q All right. Thank you.

Mr. Sloane, have you ever heard of the Round Prairie Field?

A Yes.

Q Could you tell us what it is?

A It is a field adjacent to the Beaucoup Field, north and east, I believe.

Q Of Beaucoup?

A Yes.

Q Who owns that field, do you know, sir?

A United Electric, I believe.

Q Mr. Sloane—

MR. HEDLUND: I am going to object to [44] this line of questioning as being entirely outside of the scope of the direct examination.

BY MR. CUSACK:

Q Mr. Sloane, in the event that—

MR. HEDLUND: I want to have a standing objection to this line of interrogation.

BY MR. CUSACK:

Q Mr. Sloane, in the event United Electric—one preliminary question. Do you know whether or not the coal in the Round Prairie Field and the coal in the Beaucoup Field is the same coal, the same general field?

A The same general field, yes.

Q Would it have the same general characteristics?

A As far as I know, yes.

Q In the event, Mr. Sloane, that United Electric opens up an underground mine at the Round Prairie Field, do you think that the chance of United Electric, or shall I say, the serious consideration given to United Electric by Alcoa to mine the Beaucoup Field would be increased?

A Not necessarily. It depends on their [45] mine shaft location. If, for example, it were immediately adjacent to our field, it would have an effect—

Q What affect—

A (Continuing)—and if it were considerably further away, it would have no effect at all.

Q Assuming that the mine shaft was considerably close, was placed close to the Beaucoup Field and that this was a proper, competent, underground mine, well constructed, what chance do you think United Electric would have in mining Beaucoup?

A I think they would have a good chance. It would make economic sense.

Q A little bit about the Beaucoup Field, if we could,

sir, a little about the geology. What number is the seam at Beaucoup, do you know?

A Number 6.

Q Do you know the thickness of it?

A It varies from 61 inches to 96 inches and averages about 78.

.

[48] Q Now, you also testified that in Texas you purchased reserves for power generation which were oil and natural gas, is that correct?

A Yes—wait a minute. We did not purchase those. We developed them.

Q You developed them?

A Yes.

Q I see.

A We did our own drilling and development.

Q Do you contemplate that Alcoa will use oil or natural gas for electrical generation in the midwest?

A No.

Q Could you tell us why?

A Because we can obtain coal generation cheaper.

Q Is coal the preferred fuel for electrical generation in the midwest?

A Yes.

Q Do you contemplate that this will continue?

A Yes.

Q For about how long?

A Until such time as atomic energy can [49] produce electricity at the same cost.

Q Can you give us some idea when you think this will take place?

A I cannot answer that one, not being qualified, but I can tell you what our consultant has to say about it.

Q Let's hear what the consultant said.

MR. HEDLUND: I object as hearsay.

MR. CUSACK: You may go ahead.

BY THE WITNESS:

A The consultant tells us that in that particular area, and we are talking about the midwest now, it will never be as low in cost of generation as mine mouth coal.

Q Mr. Sloane—

A That is, with that particular location in mind.

Q With the midwest in mind?

A Yes.

Q What is the name of the consultant, sir?

A General Nichols.

Q Where is he located, please?

A Washington.

. . . .

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[3]

EXCERPTS FROM DEPOSITION OF
HUGH E. PETERSEN, TAKEN MARCH 13, 1969

* * *

HUGH E. PETERSEN,

called as a witness by the defendants herein, having been by me, the said Claude W. Youker, Jr., as Notary Public aforesaid first duly sworn, was examined upon oral interrogatories, and he did thereupon depose and testify as follows:

DIRECT EXAMINATION

BY MR. KEMPF:

Q Will you state your name, please.

A Hugh E. Peterson.

Q What is your home address?

A 120 Thorntree Lane, Winnetka.

Q Are you appearing for your deposition this morning pursuant to subpoena, Mr. Petersen?

A Yes, I am.

Q By whom are you employed?

A J. W. Petersen Coal & Oil Company.

Q What is your business address?

A 800 West Division Street in Chicago.

Q What is your present position with the [4] J. W. Petersen Coal & Oil Company?

A I am President of the Company.

Q When was the Petersen Company founded?

A In 1899.

Q Could you describe briefly, Mr. Petersen the nature of your company's business?

A We are basically retail coal distributors. About 75 percent of our business is in retail coal; the other 25 percent is retail oil. The coal business is the backbone of our business.

Q What is your approximate size in the coal retailing end of the business in Chicago?

A We are the largest retailers of coal in Chicago.

Q How long have you yourself been in the coal business, Mr. Petersen?

A Twenty-eight and a half years.

Q Were other members of your family in the business?

A Yes. My grandfather started the business in 1899, and my father was president of the company until his death last fall.

Q What positions have you held during your 28 years with the company?

[5] **A** When I started, I worked as the shipping clerk at our Division Street yard, which is our office here, our yard here. I then went to our Rogers Park yard as a salesman and worked several years selling in the Rogers Park area.

Then I came back to Division Street and was Sales Manager of our Division Street sales force, and then handled the sales for all three yards as General Sales Manager, in the capacity of Vice President of Sales.

Then my father was in poor health for a number of years toward the end, and I was in the office about half of the time and the other half of the time outside selling, or handling sales.

Q Would it be fair to say, Mr. Petersen, that you are an experienced coal executive, knowledgeable in the sale of coal to the retail trade?

A I believe I am.

MR. FUTTERMAN: We object to that question and move to strike on the ground that it is leading.

BY MR. KEMPF:

Q How many tons of coal did your company [6] sell during 1968, Mr. Petersen?

A Approximately 345,000 tons.

Q How many coal yards does your company operate?

A Three.

Q Do these all have rail facilities?

A They all have rail facilities, but our Division Street yard has water facilities which is what we use fundamentally for the bringing in of coal to this yard. The other two yards are entirely rail.

Q I would like to turn for a moment, Mr. Petersen, to your company's coal-purchasing activities. First of all, from what general areas does the Petersen Coal & Oil Company secure its coal?

A We buy coal from southern Illinois, western Kentucky, eastern Kentucky and West Virginia.

Q Approximately how much of your coal, in terms of percentage, comes from southern Illinois and west Kentucky?

A Approximately one-half; 50 percent.

Q And the other half?

[7] A From eastern mines, eastern Kentucky, fundamentally, and some from West Virginia.

Q In purchasing coal, is your company able to secure volume train rates?

A We buy everything on volume train rates unless the mines are in a position that they cannot ship volumes, but we practically insist that it come by volumes because there is a freight saving.

Q Does your company purchase any coal from the Freeman Coal Mining Corporation?

A Yes, we do.

Q Approximately how many tons per year?

A During the last twelve months we purchased approximately 45,000 tons of coal. The year before it was about half that much because we were operating an affiliated company on the South Side which did the purchasing, and they purchased about 25,000 tons, but that purchasing has been combined, now, in the last twelve to eighteen months; it has all been bought by Petersen, and it was about 45,000 tons from Freeman.

Q Does your company purchase any coal from The United Electric Coal Companies?

[8] A No, we do not.

Q To whom does the Petersen Coal Company sell coal?

A We sell to apartment buildings and apartment hotels. I would say in excess of 95 percent of our tonnage goes to apartment buildings and apartment hotels.

Q For what purpose do these customers use the coal which they purchase from you?

A It is for heating.

Q Are there any particular types of furnace which these apartment buildings or apartment hotels have?

A Yes. They have almost all underfeed stokers.

Q Is an underfeed stoker furnace capable of burning any type of coal?

A No, it is not. In our opinion—well, it just is not, that is all.

Q Does the coal have to meet certain characteristics?

A Yes. It should be a low ash, fairly low ash coal, less than seven or eight percent ash.

[9] It should be high fusion so the coal does not melt when it is pushed, in the event of a cold morning when the fan comes on full blast the coal cannot melt, and it should be around 2300 degrees fusion, which a boiler gets up to in those conditions.

Q Is that a maximum or a minimum?

A That is at least a minimum. We feel around 2300 degrees fusion point of the ash, it should be. Every coal melts at a certain temperature and it should not melt at a lower temperature than 2300 degrees.

Q All right.

A It should be a fairly high heat content coal or BTU coal, about 13,000 BTU per pound, and this again is to get the heat up within a certain prescribed time.

In other words, the stoker cuts on, say, at 5:30 or quarter to six in the morning, and he should have heat on the building within an hour or so on a cold morning, and it has to have that much heat to conform to that.

Q Does the coal which you buy from Freeman meet these characteristics?

[10] A Yes, it does.

Q Would coal from United Electric's mines in Fulton County and Belleville work satisfactorily in an underfeed stoker?

A No, it will not. In our opinion it is not coal that does give satisfactory performance in underfeed stokers.

Q Does United Electric compete for that segment of the coal business?

A No. I do not believe they have competed. We have never bought any coal from them, and as far as I can remember they have never even solicited our business.

Q Are you familiar with the air pollution legislation that has been enacted here in Chicago?

A I am very familiar with it.

Q Will this have any effect on the general use of coal from UEC's mines in Fulton County and Belleville in the Chicago area?

A Yes. It will be ruled out of the Chicago area due to the sulfur content.

On July 5th of this year there is a sulfur limitation on coal used in the Chicago area. The coal cannot exceed two and a half percent sulfur, [11] and that will rule out all the United Electric coal, I believe, that they have, and then the sulfur limitations drop further in the years ahead, but it will be ruled out with the first limitation.

Q Does your company encounter competition from other fuels in selling coal to apartments and apartment hotels?

A We certainly do. The gas company is tremendously active and are successful in taking a considerable amount of business every month, every year. We are continuing to lose substantially.

Q How does this work?

A They appeal to the apartment building owner through television, radio and newspaper ads, and solicitation, too, on the grounds that gas is cleaner, it does not have any smoke, and they try to get across the idea that it is not much more costly, although we feel that it is considerably more costly, but they have this slogan, "Gas does the big jobs better for less," and it seems to be catchy and influences some people.

There is labor saving with gas. A janitor certainly is anxious to see gas go in because then he does not have to get up and start [12] his stoker first thing in the morning, and have to be on the job at 6:30.

Some of these janitors have as many as seven and eight buildings and today they are largely coal-fired, which means that he has to get an early start and cover his buildings, whereas with gas heat he can sleep later.

Q What about the actual cost of conversion? Is that high?

A No, it is not. They have got that down to a fairly reasonable point, and they can use existing boilers, so it is not a big cost factor.

Q What about delivery and storage problems?

A Well, of course, with gas they can then convert the coal bin to a laundry room or what-have-you.

They also can avoid a coal delivery every week or every ten days, whatever it might be, every few weeks.

As careful as we try and be with delivering coal, you still have some dust which gets into the basement which, again, if people are drying laundry or have things stored, will get some coal dust on it.

[13] Another problem that we are going to be facing in this air pollution ordinance, which is going to favor gas, is the fact that garbage will not be allowed to be burned a year from July 5th in a boiler, and this is going to be very hard on coal.

MR. KEMPF: Off the record, please.

(There was discussion off the record, after which the taking of the deposition was resumed, as follows:)

MR. KEMPF: Will you read the last answer, please, Mr. Reporter.

(The record was thereupon read by the reporter as above recorded.)

BY MR. KEMPF:

Q Continue, please, Mr. Petersen.

A Garbage today is burned in the boilers of almost all coal-fired apartment heating plants and provides heat value which lowers the overall cost of heating.

When the ordinance regarding garbage burning goes into effect on July 5th, 1970, apartment buildings will either have to have the garbage hauled or burn it in a double barreled gas-fired [14] incinerator.

We feel that most buildings will put in incinerators and at that time, when this type of installation is being made, many of them will go to gas-fired boilers for heat-

ing, or I should say, will put gas into their present boilers for heating.

Q In the light of all this, Mr. Petersen, what is the long range outlook for the retail coal market which your company serves?

A We feel that the retail coal industry, as an industry, if you can call it that, has a life of only about five years.

We feel that it will still exist, that is, there will still be companies selling retail coal in Chicago for many years to come, and we intend to be one of them, but I think you could compare it to the ice business, where today there are two or three ice companies left, selling ice.

All two or three of them—there are several left—are doing a good and profitable business, but it could hardly be considered much of an industry any more, whereas 25 or 30 years ago it was a very large industry.

[15] It was a lot like retail coal, where they had a large number of ice companies selling ice by truck and delivering it to apartment buildings and homes and so on, and now there are just a couple left. I think this is just about the way the retail coal business is going to go, gradually, and within five years it is going to be a fraction of its present size here in Chicago.

Q What about new apartment buildings and apartment hotels that are being constructed? Do any of those use coal?

A I do not know of a single new apartment building that has put in coal, in the Chicago area. All of these are gas heat or electric heat.

There are very few on oil, an occasional one on oil, but gas and electric are the ones who are getting this business.

Q You have described a number of characteristics which you said a coal must have to be used in underfeed stokers which are found in apartments and apartment hotels. Does the City of Chicago have any legislation which seeks to insure that when a customer orders a specific type of coal it is in fact delivered to him?

[16] A Yes. There are ordinances pertaining to the weighing of coal, the ticketing of coal and prohibiting the mixing of two kinds of coal.

We operate under quite stringent limitations on what we can do with regard to delivery or mixing. There is no mixing of coal allowed in Chicago.

Q Has the fact that both Freeman and UEC have been controlled by one company had any effect on the J. W. Petersen Coal Company?

A No, not at all.

Q Why is that?

A Well, we do not buy from United Electric. We do not feel their coal is applicable. We have bought from Freeman and when they combined, it had no effect on us at all.

Q Do you see any adverse effect on your company if General Dynamics is allowed to continue owning both Freeman and United Electric?

A No. I do not.

Q Would there be any benefit to your company by forcing Freeman and United to operate independently of each other?

A No.

.

[29] Q What do you anticipate will be the annual retail consumption of coal in Chicago in five years?

MR. KEMPF: I am going to object to this question. He said he had difficulty piecing together what it was even in years past, and for him to estimate what the combined total will be for 55 companies, I think he testified there were, seems to me to be indulging in the highest form of speculation.

BY MR. FUTTERMAN:

Q Would you answer the question, please, Mr. Petersen?

A That is going to be very conjectural, because we do not know how difficult the Air Pollution Department will be with users of coal.

For example, I received a call yesterday afternoon from one of my larger customers who, under the existing

ordinance, had received two arrest tickets on two separate buildings in the last week. He felt that the Air Pollution Inspector had been extremely harsh and wanted me to contact the Air Pollution Department and have them be more moderate.

[30] Incidentally, when, under the present rules of the Air Pollution Department, he gets a second arrest ticket, he will go to court where there will be a court case and a considerable fine.

I told him, "It's about like calling up the Police Department and asking the Police Commissioner to not have the police so hard on somebody because he has one speeding ticket and the next one he will be in trouble, possibly in jeopardy on even driving his car."

If the attitude of the press and the political climate in Chicago is such that air pollution is something that is being pushed to eliminate, as fast as possible, they can, under these ordinances, practically, by the fear of these arrest tickets and fines, accelerate the conversion to gas, so to answer your question as to what it will be in five years, I just do not know how hard this may be.

I would say that certainly we are going to lose, as a minimum, ten percent a year, and it could be greater than that, so carrying that out, I would say as a minimum, we would have lost half of our business in five years, and very probably [31] 60 or 70 percent of our business at the end of five years.

Q In your opinion, has there been an increase or decline or has use stayed the same for oil in the home heating market in Chicago?

MR. KEMPF: I am going to object to this as being outside of the scope of my direct examination. I did not raise this at all.

MR. FUTTERMAN: Would you answer the question, please.

BY THE WITNESS:

A We are very small in our oil sales, compared to the Chicago market. We consider ourselves coal people basically.

We have handled oil with people who burned coal and converted to oil and who wanted to stay with us, but I do not consider myself an expert at all in oil.

In answer to your question, though, I would say there has been a decline in the use of oil in the heating market in Chicago, due to the activities of the Gas Company.

.

[34] Q Is coal cheaper than oil for apartment buildings?

A Yes.

Q Is coal cheaper than electricity for apartment buildings?

A Yes.

Q Mr. Petersen, have you ever conducted any tests or analyses of coal that comes from Central Illinois and Fulton County?

A What do you mean, have we ever conducted any tests? What do you mean by a test and what do you mean by "we" conducting?

Q Has your company ever analyzed the coal from Central Illinois and Fulton County for purposes of determining whether or not it will be suitable for the apartment building market in Chicago?

MR. KEMPF: I object to this as having been asked and answered in the course of my direct examination. I went into this subject at length.

MR. FUTTERMAN: Would you answer the question, please, Mr. Petersen.

BY THE WITNESS:

A We have in the past purchased a car or [35] two of coal from Central Illinois and had Commercial Testing & Engineering Company run tests on it and put this coal out into apartment buildings to try, if that constitutes what you mean by running tests. That is what we have done.

BY MR. FUTTERMAN:

Q What is the name of the company you are operating on the South Side?

A Mogg Coal & Oil Company.

Q Was that previously an independent company?

A It was owned by the owners of the Petersen Coal & Oil Company plus some other people.

Q Have you ever purchased any coal from United Electric?

A I believe some years ago we bought some coal from United Electric, but it was quite a few years ago.

Q Where was that coal from?

A From their Buckheart Mine, if I recall correctly. That was the name of one of the mines we bought from.

I am going back a few years now, and I do not specifically recall the mine names.

[36] Q When was the last time you were solicited by a United Electric coal salesman?

MR. KEMPF: I am going to object to that as outside of the scope—withdraw the objection.

BY THE WITNESS:

A Probably five years ago, or four years ago.

BY MR. FUTTERMAN:

Q Can you give us the name of the man who solicited you?

A Dave Ford, I believe, was the last man I talked to from United Electric.

Q What kind of coal was he trying to sell you at that time?

A Banner.

Q Did you make any tests or analyses of the Banner coal he was trying to sell you?

A Yes, we did. We got a couple of cars of it.

Q What were the results of those tests?

A We felt it was not of a quality to use in our business.

Q Prior to four or five years ago, or the [37] last time you testified that a United Electric salesman called upon you, did a United Electric salesman call on you on a regular basis?

A What do you mean by "regular"?

Q Well, did they come around once a year or once every few months, trying to sell United Electric coal?

A I would say that maybe once or twice a year we would hear, or maybe a little more than that. I really forget.

Q You know, do you not, that Banner coal is used by the Metropolitan Sanitary District for its industrial plants?

A I have only heard this. We have never bid on any of this type of business. It is heavy steam business.

Q Subsequent to 1964 or 1965, is it your testimony, then, that United Electric ceased to call on you or ceased to solicit your business?

MR. KEMPF: I would like to have that question read by the reporter.

Q (Read by the reporter.)

BY THE WITNESS:

A Yes. I would say that is true. Mr. [38] Tarzy was the sales manager, and I would once in a while run into him on the street and he would say hello, but I would not say he ever really solicited.

He knew we were not interested in what he had, and I think that is why he just did not push it.

BY MR. FUTTERMAN:

Q Did Mr. Tarzy ever refer you to Freeman Coal?

A Did he ever refer me to Freeman Coal?

Q Yes.

A For what purpose?

Q For the purpose of buying coal.

A We were buying from Freeman long before they were combined.

Q Did you ever have any conversations with Mr. Tarzy concerning your purchases of Freeman coal?

A No.

Q Who else do you buy coal from besides Freeman Coal Mining Corporation?

A Currently, right now, at this particular time, or within the last several years?

Q At this time, right now.

A Right now.

.

[45]

REDIRECT EXAMINATION

BY MR. KEMPF:

Q During your cross examination by Mr. Futterman, you made reference to the University of Illinois Chicago Circle complex.

A Yes.

Q Do the furnaces which burn coal there have underfeed stokers?

A No, they do not.

Q Do they have chain grate stokers?

A I understand they are chain grate stokers.

Q You also referred to the Metropolitan Sanitary District. Do they have underfeed stokers?

A I am sure not. Again, I have never gotten into those plants, but they are heavy steam producers and they would have equipment such as a chain grate or spreader in those.

Q Are a chain grate stoker or a spreader significantly different from an underfeed stoker?

A Yes, they are.

Q With reference to the coal requirements that must be met by coal in order to be used in those furnaces, are they also substantially different?

[46] A Yes. They can use a much lower grade coal satisfactorily in most of them.

Q You referred to the provision of the air pollution ordinance relating to variances during the course of your cross examination.

If a company such as Edison sought a variance and it were granted, what sort of provisions would the granting authority make? Would this allow them, in other words, to continue to use the high sulfur coal indefinitely, or would there be some phase-out?

MR. FUTTERMAN: I object to that question on the same grounds that you raised for your objection, namely, that the ordinance itself would be the best source of information.

THE WITNESS: Do you want me to answer?

MR. KEMPF: Yes.

BY THE WITNESS:

A I understand that they would be granted a variance for a certain period of time and then if they had to go beyond, they would come in again and ask for an extension of that—

MR. FUTTERMAN: I withdraw the objection.

[47] BY THE WITNESS:

A (Continuing) —but I am not an expert on this.

MR. FUTTERMAN: I withdraw my prior objection.

BY MR. KEMPF:

Q You stated during the course of your cross examination that you had at one time tested some Central Illinois coal.

A Yes.

Q Did the Central Illinois coal prove to be satisfactory?

A No, it did not.

MR. FUTTERMAN: Just a minute, please, Mr. Petersen. Would you re-read that question, please, Mr. Youker.

MR. KEMPF: The witness has answered the question.

(The record was thereupon read by the reporter as above recorded.)

BY MR. KEMPF:

Q You stated during the course of your cross examination that Mr. Tarzy and the other sales personnel of United Electric knew that you [48] were not interested in their coal. Is this because you told them that?

A I believe they knew that we had tested this type of coal and found it unsatisfactory, and as a result just did not feel there was any purpose in pursuing it with us.

Q This, then, would account for their not soliciting you in recent years?

A Yes.

MR. FUTTERMAN: I object as leading, and move to strike as suggestive.

MR. KEMPF: I will restate the question.

BY MR. KEMPF:

Q Would this account for their failure to solicit your business in recent years?

A Yes, it would.

MR. CUSACK: Objection as calling for opinion and hearsay, and move to strike.

The witness has no knowledge of the frame of mind of United Electric's employees.

* * * *

[2]

EXCERPTS FROM DEPOSITION OF
JOHN T. MIDDLETON, TAKEN MARCH 13, 1969

* * * *

JOHN T. MIDDLETON,

a witness of lawful age, was duly sworn by the notary public and, being examined by counsel, testified as follows:

DIRECT EXAMINATION

BY MR. HAUBOLD:

Q Sir, would you state your name and present position?

A I'm John T. Middleton; I'm Commissioner of the National Air Pollution Control Administration, which is an agency in the Department of Health, Education and Welfare.

* * * *

[12] These documents in turn then were sent to the Governors [13] of the affected states—using your illustration of Chicago, to the Governor of Indiana and the Governor of Illinois—together with a letter explaining what the actions were to be as a result of his receipt of these documents and the resultant action is that set forth in the Clean Air Act as amended, namely, the Governor has the opportunity to indicate his intent to establish air quality standards. He has then a specified period of time in which to establish the air quality standards for the criteria announced—sulfur oxide and particulate matters—and an additional 180 days for the development of an implementation plan which is actually a production of strategy.

Q The production of strategy plan you just mentioned, is it in accordance with your understanding of what that plan should include to comply with the law? Does this plan have to consist of legislation or formal action by the State Government?

A The implementation plan very simply is a strategy that would be adopted on an interstate basis to assure the air quality standards adopted are met.

Q This could presumably include legislation contemplated or other means of controls that the states intend to utilize to effect their standards, is that correct?

A It could include a variety, a large gamut of things that could be used.

[14] The intent of the Act is to allow states to exercise as much versatility and enervation as possible in arriving at ways to reduce the present air pollution to acceptable levels and, furthermore, to actually prevent future air pollution.

Q Does your office review plans that are submitted by the states to see if they conform with standards which you have developed?

A In keeping with the Air Quality Act of '67, the Clean Air Act as amended, the Secretary will approve the standards—review the implementation plans, determine whether the standards proposed are consistent with the criteria.

Our Administration will be responsible for making recommendations to the Secretary.

Q Is the National Air Pollution Control Administration, has it been designated by the Secretary to perform these functions?

A Yes, it has.

Q What action is contemplated under the Clean Air Act if the state's standards are not sufficient in your judgment?

A Would you repeat the question?

MR. EISEN: Do you want to repeat the question? I have an objection as soon as he repeats the question.

(The reporter reads back the pending question.)

[18] The appropriate legislative responsible jurisdiction that will be geographically involved in our system is identified in the consultation records and in the Federal Register.

Q I see.

These are set forth, the various counties?

A Specifically listed—it may or may not be a county. There is no question about the political jurisdiction that will be involved.

Q Now, Dr. Middleton, for the record could you identify the various pollutants which have been designated by the National Air Pollution Control Administration?

A Yes.

Q Would you do so, sir?

A The air quality criteria for sulfur oxides and the second one for particulate matter.

Q How do you define particulate matter?

A Any gross substance in the atmosphere in particle form, be it liquid or solid.

Q How do you define sulfur oxides, for purposes of this?

A Any combination, any compound, be it hydrogenous or heterogenous, that contains sulfur and oxygen.

.

[38] Q Is it a fact, Dr. Middleton, that a substantial number of Federal facilities have converted their fuel systems in the past several years from coal to gas or other fuels which emit a lower rate of sulfur oxide?

A I am not aware of the specific number of these, but I would certainly be disappointed if there had not been a response to the Executive Order requirement in our regulations.

Q You stated, Dr. Middleton, that new techniques may become available which would enable you to, in essence, clean up the present fuels, such as high sulfur coal, and enable you to utilize the presently existing system.

Do you have any knowledge as to what the time table would be for this? Do you have any opinion?

A Yes.

Let me introduce the subject by saying it is the policy of this Administration to be certain that we not only use the existing coal supplies but to make certain that those that may become available are properly developed, because this nation's fuel energy requirements require that all the existing coal, oil, et cetera, be used.

Within that framework then, this National Air Pollution Control Administration has established a research and development program—unfortunately only very recently—which [39] is dedicated to developing the several kinds of ways in which the sulfur oxides and particulate matter problems can be abated.

Our research and development effort in this regard really only began with significance only in 1967—there was an effort a very few years before that. We presently spend about fifteen million dollars specifically on sulfur oxide removal from coal—sulfur oxide removal from the combustion of coal, I should say, excuse me.

The systems—there are nine areas, and I think maybe we can only speak to three of them very briefly—one is the cleaning of coal. There are ways today to clean coal, simply by the removal of ash in today's cleaning system removes some sulfur.

We are spending a considerable amount of money to develop a system called deep coal cleaning. This is a system in which we separate coal into a clean part and a dirty part—the normal cleaning system allows you clean, dirty and in-between and very often one loses a lot of the Btu in such a cleaning system. Our purpose is to develop a coal cleaning system, mechanical, in which the pyritic form of sulfur is removed by mechanical means—mechanical meaning usually specific gravity arrangement.

[40] This program is well on its way in areas where most of the sulfur is pyritic. This could be brought into play today in areas where the pyritic form is such that it is difficult to remove mechanically—by air separation, for instance. We'd have to develop these newer techniques. We're in the midst of this project and I would expect within two, two and a half years that these systems would be developed on a commercial scale, so they are imminent.

Q Dr. Middleton, I don't mean to interrupt you, but in terms of coal cleaning this process is not adaptable, if I understand it correctly, where the coal sulfur or the sulfur in the coal is of an organic nature, is that correct?

A That's why I mentioned that this is for coals that are pyritic. Most Illinois coals are—strike that, I think we'd better start over.

MR. EISEN: Can I interrupt here for a moment?

I don't think your statement was a proper statement of the record of Dr. Middleton's testimony.

He said that, as far as the removal—as I understand it—the removal of sulfur, insofar as the organic materials, pyritic materials—

THE WITNESS: Pyritical materials.

MR. EISEN: —there are such systems presently [41] developed, and I thought he said in two or two and a half years—

MR. HAUBOLD: If you want to testify,—

MR. EISEN: You were summarizing the man's testimony and I thought you were summarizing it incorrectly. You said as far as the organic, the non-pyritic material.

Now, maybe I'm not summarizing it correctly—

MR. HEDLUND: Why don't we let Dr. Middleton take care of it?

MR. EISEN: —that such would be available in two or two and a half years, commercially available.

THE WITNESS: Why don't I give you a recapitulation? I think we're becoming far too involved in the terminology and not enough in the time scale of the general policy of this Administration.

Today one cleans coal for a variety of reason, primarily to take the ash out. Today, in taking out ash, you also take out some sulfur. It is in the form of iron pyrites. None of the sulfur is taken out if it is solely organic sulfur in that system.

Second point: We have a significant research effort to define systems for deep cleaning of coal that will take out not only the large pyrites but small pyrites. We expect this [42] system to be available commercially within certainly two years, two and a half. This system would be—probably would remove eighty to ninety percent of the pyrite sulfur in coal. Given a satisfactory sized distribution it will not take out the organic sulfur.

Then, three, I spoke to Illinois coal. Illinois coal typically—and by saying typically, I realize that there is a

vast range of sulfur levels in the form in which sulfur is present in the coal in Illinois, but on the average about half the sulfur in coal in Illinois is in a pyritic form, so, if one had a four percent sulfur and it was—excuse me, a four percent sulfur in coal, and half of this was in pyritic form and the nature of the form of that pyrite was such that it was amenable to the mechanical cleaning, one could derive a two percent coal from that four percent coal. If the pyritic form were so finely divided that it could not be separated by specific gravity means, then one could not effectively clean that coal.

It is for several of these technical reasons that we also have other ways of dealing with the sulfur oxide problem.

BY MR. HAUBOLD:

Q Just to make sure we have this, that I am certain what your statement is, you say that you would hope that there would be an economically viable system within two to three years?

[43] MR. EISEN: I don't think that Dr. Middleton had an opportunity to finish his answer.

Have you finished your answer?

THE WITNESS: I was going to move away from the technology into other ways that we were going to do this.

MR. HAUBOLD: I merely wanted to ask this question to clarify this so we can move on to this other subject.

MR. EISEN: I'd like Dr. Middleton to have the opportunity to answer the question completely.

THE WITNESS: There's a great deal more that could be said—in fact, we are looking forward to the separation of deep cleaning of coal as a way not only of providing a clean portion which would not require any subsequent treatment, but may I call the other portion dirty—in other words, high in the sulfur content—providing a new way of burning that, so that we in combustion develop heat and power as well as sulfur products so that the coal resource is more efficiently and effectively used than it has been heretofore.

This is the nature of our research and technology program, directed towards the policy that we will make optimum use, maximum use, best use of coal as a resource in this country. Rather than throwing away the dirty piece, we will be using that as a source of energy and sulfur compiles. In addition, the [44] same process could be used to reduce the size of compiles as a variety of other beneficial aspects.

I did not speak to the economics of the situation. One must presume that, if it is to be adopted for commercial use in a satisfactory market, we have every expectation that that is not the problem.

I then was moving into the other area of gas cleaning, which is a system in which you burn whatever fuel you have, collect the gas stream and treat it. This is a very significant part of our research and development program. There are a number of techniques that are in the early generation stage and there are a few that are fairly well developed.

There are still other ways of combating sulfur oxides and one is the—excuse me—the physical location, the geographic location of power plants, the nature of the fluidized bed combustor, the kinds of stacks, the height of the stack, its relationship to the meteorology of the area, so that to really consider control of sulfur oxides one must look far beyond the limiting of the use of fuels based on the sulfur content.

It's our expectation to have a spectrum of control techniques available which will not only facilitate but enhance the use of coal.

[45] BY MR. HAUBOLD:

Q Can you make any predications, Dr. Middleton, based on a reasonable degree of certainty in your own mind, as to what this time table will be?

A We have a dry limestone injection system for demonstration at the Tennessee Valley Authority now, which are probably sixty percent or better efficient, which are on 25 megawatt power plants. It looks as though these will be successful. They will have some use in some places.

Since we're at that size, we know that design barometers, whereas there is a degree of speculation at this point I would expect control techniques to be commercially developed from this in certainly a two to four year period.

The wet limestone scrubbing, a system now used by two locations, Kansas City and St. Louis, stems from the combustion engineering organization. Since this is in place and operating, although still at a demonstration stage, I think again with some improved research—excuse me, some more research to further improve the system, that here we are again at an area in which the—certainly the two to four year, two and a half to five years, these would be able to be retro-fitted on existing power plants to take care of sulfur oxides in the gas stream, in the gas cleaning systems.

Around the corner and a little further away perhaps [46] are still better techniques for the cleaning of stack gases. These include the metal oxides, alkalized aluminum and the molten carbonate systems.

If the question is when will some of these be commercially applied, I would estimate that the deep cleaning of coal is in the fairly early stages of application—the average period would certainly be three years or less. The wet limestone in its present problems—engineers being the kind of creatures they are—I would expect this to be commercially adoptable in certainly two and a half to four years. The molten carbonate, while it's a much more sophisticated and much more effective system and it produces a useful product, sulfur, it is just now going into the bench pilot stage, but the nature of the system is such that we may be able to avoid going through the demonstration phase, so here again we might expect the system to be commercially applicable—I mean actually designed into the construction of new power plants, it would not be applicable to existing power plants—in power plants to be constructed in four to five years.

We are then on the threshold of some significant breaks in the control of sulfur oxides.

Q Again, Dr. Middleton, without appearing to be repetitive, I just want to make sure we are clear on one

thing and [47] that is, the deep cleaning method removes only pyritic sulfur?

A You have gotten the message.

Q Fine.

Dr. Middleton,—

A I must add a word of caution—it only removes pyritic materials that are of a size that it may be removed by air separation or other mechanical means.

It's not just if it's pyritic, it's the nature and distribution of the pyrites in coal.

Q Do you have sufficient information, Dr. Middleton, as to what the combustion engineering system will cost?

MR. EISEN: What combustion engineering system?

MR. HAUBOLD: He referred to a system—

MR. EISEN: You mean the company, Combustion Engineering system?

THE WITNESS: I did not refer to it as combustion engineering. I referred to it as a wet limestone scrubber as presently being sold by Combustion Engineering.

I do not know at this time what these costs are since it is in the demonstration stage with two commercial power plants. I think one would be able to draw the conclusion that it's within feasible economic range.

BY MR. HAUBOLD:

[48] Q When you say that a system would be commercially adoptable, do you mean economically adoptable as well as feasible from a technical standpoint?

A I mean that it would be technically feasible and economically possible to use.

MR. HAUBOLD: Fine.

MR. HEDLUND: Could we go off the record?

(Discussion off the record.)

MR. HAUBOLD: As to the following documents, pursuant to agreement of counsel who have stipulated as to the authenticity of these documents, the following documents are offered: First, Air Quality Criteria for Sulfur Oxides; number two, Control Techniques for Sulfur Oxide Air Pollutants; number three, Air Quality Criteria for Particulate Matter; four, Control Techniques for Par-

ticulate Air Pollutants; five, Report of the Secretary of Health, Education & Welfare to the United States Congress, dated January 1969; next is the Progress in the Prevention and Control of Air Pollution.

On the first document, we should also describe that as Air Pollution Abatement by Federal Facilities Report, dated January 1969.

The next is a report entitled Progress in the Prevention and Control of Air Pollutions, Second Report of the [49] Secretary of Health, Education & Welfare, dated January 1969, and finally—

. . . .

[3]

EXCERPTS FROM DEPOSITION OF
P. W. DORRANCE, TAKEN MARCH 20, 1969

* * * *

DIRECT EXAMINATION

BY MR. HEDLUND:

Q Would you please state your name, sir?

A Philip W. Dorrance.

Q By whom are you employed?

A Alcoa Minerals of Jamaica, Incorporated.

Q What is your present position?

A General Manager.

Q Are you a citizen of the United States of America?

A Yes.

Q Mr. Dorrance, could you briefly describe your educational background and your employment experience?

A I am a graduate Mining Engineer with a B.S. in Mining Engineering from Michigan Technological University; served three and a half years United States Naval Reserve, as Engineering Officer and Captain, then Lieutenant Senior Grade—discharged with the rank of Lieutenant Senior Grade in 1949; employed by Aluminum Company of America 1945/1946 as a Mining Engineer at Rosiclare, Illinois—first by mining operations, and also as an Engineer/ [4] Manager of their zinc mining operations in the state of Kentucky. I was at these operations for ten years. In 1956 I was transferred to the Aluminum Company of America Headquarters Office, Pittsburgh, as Staff Engineer. I was at Pittsburgh for 12 years, during which time I was engaged in mining administrative and technical duties in Alcoa's lignite operations in United States and foreign countries. In 1968 I started my present position in Kingston, Jamaica.

Q Could you again, very briefly, please, but generally, describe your functions and responsibilities, at present, for Alcoa?

A At present for Alcoa I am General Manager in

charge of our bauxite mining and shipping operations and also our construction activities for alumina plant here in Jamaica.

[5] Q Between 1956 and 1960 to whom did you report in Pittsburgh?

A Mr. Roy Miller, Chief Mining Engineer at Alcoa.

Q Then did you continue to report directly to Mr. Miller until his retirement?

A Yes.

Q And when did he retire?

A October 1962.

Q Are you familiar with the coal reserves that Alcoa presently owns or otherwise controls?

A Yes.

Q And throughout, Mr. Dorrance, when I will be speaking of coal, I will not be including lignite. Could you describe generally where these reserves are located?

A Generally in the Ohio river valley in the mid-western parts of the United States.

Q Are some of these reserves located in Indiana?

A Yes.

[6] Q In what county, if you recall?

A Warrick.

Q Some of the reserves are located in West Kentucky?

A Yes.

Q Approximately where?

A Union and Webster counties.

Q And are some of these reserves located in Illinois?

A Yes.

Q In what county in Illinois, or near what town?

A Well, near Pickneyville, Illinois.

MR. CUSACK: Let it be stipulated that this is in Perry County.

MR. HEDLUND: What is the name that is used by Alcoa to refer to the reserves that it controls in Southern Illinois?

A Beaucoup Field.

Q Are you familiar with the acquisition of those reserves by Alcoa?

A Yes.

Q Approximately when were the reserves in Indiana acquired?

A In 1956/1957/1958.

[7] Q Approximately when were the reserves in West Kentucky acquired?

A In the same years.

Q When were the reserves in Southern Illinois acquired?

A The same period.

Q It is fair then to say that these reserves in these three fields were all acquired at or about the same time?

A Yes.

Q Would you tell me please exactly how Alcoa acquired the reserves in the Beaucoup field?

A Through an agreement with United Electric Coal Companies, in which United Electric Coal Companies agreed to acquire options and leases on the underground coal reserves, and to acquire these in the name of Alcoa, and to hold the same when exercised or purchased in the name of Alcoa.

Q Who, if you know, initiated this program? Was this initiated by Alcoa or by U.E.C.?

A By Alcoa.

[8] Q Who were the people directly involved at the outset of this, for Alcoa, and who for United?

A Initially, at the outset, Mr. Miller for Alcoa and, I believe, Mr. Sherril and Mr. Utterbeck for United Electric.

Q Mr. Dorrance, I wish to show you what has been marked in a prior deposition as Kolbe exhibit 61. I ask you to look at it and tell me if you can identify this document.

A This is the agreement between the United Electric Coal Companies and the Aluminum Company of America, by which the United Electric Coal Companies will acquire the coal reserves in the Beaucoup area for the Aluminum Company of America.

Q I do not recall, Mr. Cusack, whether we have a standing stipulation with respect to Kolbe deposition exhibit 61. If we do not, will you stipulate that that standing stipulation may abide to this document?

MR. CUSACK: As it was our exhibit in the Kolbe deposition I would so stipulate and ask you to so stipulate.

[9] MR. HEDLUND: It is so stipulated.

Q Is there any strip coal acreage in the Beaucoup field that is owned or otherwise controlled by Alcoa?

A No.

Q Prior to the agreement executed by Alcoa and United Electric Coal Companies, which is Kolbe deposition exhibit 61, did Alcoa make an attempt to acquire strip coal acreage in the state of Illinois?

A Yes.

Q Would you describe what attempts Alcoa made along that line?

A Well, after preliminary investigations indicated there were strip coal reserves held by certain coal companies in Illinois, Alcoa in preliminary discussions with these coal companies attempted to determine under what conditions the reserves might be available.

[10] Q Were any of these companies United Electric Coal Company—the ones that you have just now referred to?

A No.

Q Were you able to successfully conclude any such discussions with these companies with respect to Illinois strip coal reserves?

A No.

Q Could you tell me generally why not?

A Because Alcoa wanted to acquire the reserves in ownership with no strings attached as to future use.

Q And then do I understand that none of these companies were interested in such arrangements with respect to strip reserves in the state of Illinois?

A As far as I know, no.

MR. CUSACK: Strike the last answer as being speculative.

Q Did you enter into any agreement with any Illinois coal producing company other than United Electric with respect to strip reserves in the state of Illinois?

A No.

[11] Q Did you make any investigation of the availability of strip coal reserves in Illinois, for acquisition, from someone other than a coal producer?

A Yes.

Q What were the results of your investigations?

A The investigation indicated that there were no significant strip reserves available in Illinois other than those owned by coal companies.

Q Between 1956 and 1962 were you generally familiar with the working of the agreement between United Electric and Alcoa?

A Pardon?

Q Between 1956 and 1962 were you generally familiar with the working of the agreement between United Electric and Alcoa, which agreement is Colby deposition exhibit 61?

A Yes.

Q Could you state generally your responsibilities in that regard?

[12] A My responsibilities in regard to the agreement were to work with the people in the United Electric Coal Companies, in Alcoa's interest, as to the options they were acquiring and to the possibilities of the existence of coal in these options and leases, and in general to supervise the administrative agreement for Alcoa.

Q Of the three fields of coal reserves which you have described, which of those three has been developed to the point of mining?

A The Warrick, Indiana coal field.

Q Why were those reserves developed rather than the reserves in either the Beaucoup field or those in West Kentucky?

A From the point of a coal reserve, they were developed because they were strip coal and they were obtainable under the provisions that we felt were most beneficial to Alcoa for the development of our first complex, based on mid-western coal reserves.

[13] Q You state one of the reasons they were developed was because they were strip reserves. I wonder if you could tell me what you mean by that?

A Because of the economical advantage strip reserves have over underground coal reserves.

Q Are you aware of any discussions between Alcoa and United Electric, or correspondence, between 1956 and 1960, regarding the capability of the United Electric Coal Companies to develop the coal at Beaucoup?

A No.

Q Why did you not raise that question, or Mr. Miller, if you know, with United Electric during that period?

A Because it would have been a premature investigation as we did not at that time expect to use these coal reserves for some time.

Q Mr. Dorrance, I am going to hand you a letter dated December 13, 1962, from Mr. R. S. Overbeck of Alcoa to Mr. G. F. Utterbeck of United Electric Coal Company, which [14] has been previously identified in the deposition as Morris deposition exhibit 60, and I would like to direct your attention, please sir, to the second to last paragraph on page 1 of this letter which is designated with a (b), and the first paragraph on the second page of this letter, and I would also like to hand you a copy of a letter of November 29, 1962 from Mr. Utterbeck of United Electric to Mr. Overbeck of Alcoa.

MR. CUSACK: The last letter is Morris deposition exhibit 69.

MR. HEDLUND: That is correct.

Q Have you had time to review these?

A Yes.

Q With reference to the letter of December 13, 1962, which is Morris deposition exhibit 60, are you aware of any specific proposition that United Electric has made to Alcoa for leasing part of the coal in the Beaucoup field?

A No.

[15] Q Are you aware of any proposal—specific proposal, by United Electric to Alcoa, for United Electric to lease up to fifteen million tons of coal from Alcoa in the Beaucoup field?

A No.

Q Are you aware of any proposal that has been made by Alcoa to United Electric whereby Alcoa would sell,

assign or otherwise convey, for consideration, coal reserves in the Beaucoup field to United Electric?

A No.

Q Had such proposals been made between 1956 and 1968, that is prior to your coming to Jamaica, would you have been aware of such proposals?

A Yes.

MR. HEDLUND: I believe that is all I have.

[16] CROSS-EXAMINATION

BY MR. CUSACK:

Q Mr. Dorrance, you testified under direct examination in regard to an investigation made by Alcoa regarding available strip reserves in Illinois?

A Yes.

Q And this investigation was, shall we say, two-fold? You investigated strip reserves owned by coal companies—is that correct?

A Yes.

Q And then you investigated strip reserves not owned by coal companies. Is that correct?

A No. Our investigation, according as I recall, my testimony was that all significant coal reserves in the state of Illinois were owned by coal companies; therefore, we did not approach people other than coal companies in investigating or discussing strip coal reserves in Illinois.

Q And who conducted this investigation for Alcoa?

A Mr. Miller.

[17] Q Mr. Roy Miller?

A Yes, and prior to my coming to Pittsburgh, a fellow named William Barnes.

Q And was this report finalized in a memorandum of some sort?

A I am not sure.

Q Have you recalled seeing a memorandum in regard to this investigation?

A No, I recall from discussions with Mr. Miller.

Q Is it fair to say everything you know in regard to this investigation was from Mr. Miller himself?

A No, because after coming to Pittsburgh we were approached and discussions were held with some coal companies in relation to strip coal reserves in Illinois.

Q And which coal companies did you have discussions with?

A Ayrshire Coal Company.

Q That is Ayrshire Colliery Corporation?

A Yes.

Q Of Indianapolis?

A Yes.

[18] Q And who did you talk with in Ayrshire?

A This wasn't a personal discussion. This was a discussion between Mr. Miller and Ayrshire.

Q Did you have any conversation with Ayrshire?

A No.

Q Did you have any conversation with any one from any other coal company with regard to strip coal other than in Illinois?

A No.

Q Is it a fair statement to say that the information you had in regard to available strip coal reserves in Illinois was from your discussions with Mr. Miller?

A Yes, and a review of some correspondence that he had with other coal companies.

Q And could you tell us what this correspondence consisted of?

A I can't recall exactly.

Q Would it be letters—memoranda?

A Letters.

[19] Q And can you tell us who these letters were from?

A In this regard the only thing I can recall is that Ayrshire Collieries indicated that they would be willing to discuss their strip coal reserves in the so-called Denmark field in Southern Illinois with Alcoa.

Q And was this on condition that Ayrshire would mine the coal?

A No conditions were stated, just that they were willing.

Q And what did Alcoa discuss with Ayrshire?

A I was not aware of the details.

Q And who conducted those discussions with Ayrshire for Alcoa?

A Mr. Miller, if there were such detailed discussions.

Q Do you recall if there were any detailed discussions held?

A No.

Q Other than with Ayrshire, did you have any other discussion with regard to strip coal?

A No. You are talking about myself?

[20] Q Yes.

A No.

Q And were you present during any conversation with Mr. Miller in regard to strip coal reserves in Illinois, with any other coal companies?

A Yes, sir. I think at one time we discussed, in a general way, the strip coal reserves, with officials of Peabody Coal Company.

Q And who did you talk with at Peabody?

A I think it was Mr. W. J. Weimer.

Q Do you remember what year this was?

A No. It was during the period of our acquisition program—1956, 1957, 1958.

Q And where did this meeting take place?

A I can't recall.

Q You recall what Mr. Weimer stated to you?

A No, I can't recall that either.

Q Is it fair to say that all the information in regard to strip coal reserves in Illinois in the possession of Alcoa, [21] during this period over which we are having discussion, was obtained from coal producers in Illinois?

A No.

Q Where else did you obtain information?

A From Illinois Geological Survey.

Q Mr. Jack Simon?

A I believe he was head of the Division at that time.

Q What did you obtain from Mr. Simon?

A Such data that the Illinois Geological Survey had on the strip coal reserves of the state of Illinois at that time as they were willing to give to Alcoa.

Q And did you study this material yourself, sir?

A No.

Q Who did the study?

A Mr. Miller.

Q Mr. Miller reported to you the result of his investigation with regard to this material?

A In general conversation, yes.

[22] Q But you did not investigate it personally? Is that correct?

A No. The investigation of strip coal reserves—the availability of strip coal reserves—by Alcoa was done prior to my being connected with the coal reserve program for Alcoa.

Q This was before you got into this business?

A A little bit before.

Q And by Mr. Miller?

A Yes.

Q Mr. Dorrance, you testified that there is no strip coal acreage at the Beaucoup field. Is that correct, sir?

A Yes.

. . . .

[28] Q Did Mr. Utterbeck ever state to you whether or not United Electric planned to mine the underground reserves at Round Prairie?

A Yes.

Q He stated that they did intend to underground mine it?

A Yes.

MR. CUSACK: I have no further cross-examination, but move to strike, on the ground of hearsay, Mr. Dorrance's testimony in regard to the availability, or the lack of strip coal reserves in Illinois.

MR. HEDLUND: In addition to such arguments that we may make, subsequently, the fact is Mr. Dorrance is qualified to testify that in fact Alcoa made an attempt, or investigated the availability of strip reserves from other than coal producers in the state of Illinois, and that such investigation and attempt was not successful?

MR. CUSACK: Why don't you save your argument for the judge, Counsellor?

[29]

RE-DIRECT:

MR. HEDLUND: When did you have these conversations with Mr. Utterbeck concerning United Electric's intention to mine underground the Round Prairie field?

A As I recall, about 1960.

Q With respect to your lignite operations in Texas, generally, what factors are present which permits you economically to mine the lignite in the presence of one hundred and twenty feet of overburden?

A Well, the size of the stripping machines available and the nature of the overburden, generally, and the thickness of the lignite seam also.

Q How thick is that seam?

A Ten to twelve feet.

. . . .

[31] MR. HEDLUND: I think that is all.

MR. CUSACK: Mr. Dorrance, in regard to the stripping of your lignite reserves in Texas you stated that there have been increases in the stripping of overburden due to the size of the machines. Is that correct?

A It is possible to strip to the depth we are stripping because of the machines that are available.

Q From what companies are these available?

A Bucyrus-Eric, and the other company is Marion.

Q And are you using in Texas a drag-line?

A Yes.

Q Do they all—do you know whether or not there is also in production shovels which can strip to a hundred and twenty feet of overburden?

A Yes.

Q Do you know whether a wheel excavator can strip to a hundred and twenty feet of overburden, either by itself or in tandem with another machine?

A Yes.

. . . .

[34] Q Based on this differentiation between a ton of coal and a ton of lignite can you give us an opinion,

based on your knowledge and experience, as to what thickness bituminous coal would have to be, to be equivalent to the thickness of your Texas lignite reserves?

MR. HEDLUND: I object to the question in that form. It cannot be answered.

A It would be rather difficult to answer it. It would be a guess.

Q It would be less than ten to twelve feet?

A I really wouldn't be qualified to say. I don't know.

Q You spoke of a 1960 conversation with Mr. Utterback of United Electric with regard to United Electric mining the Round Prairie field. Is that correct?

A Yes.

Q Can you tell us where this conversation was held? Do you recall?

A In our Alcoa, Pittsburgh Office.

[35] Q And Mr. Utterback came and talked to you about this and other matters?

A Yes.

Q And who else was present at this conversation?

A I think just Mr. Utterback and myself.

Q And did Mr. Utterback indicate what time he thought United would underground mine the Round Prairie field?

A Not the specific time, no.

MR. HEDLUND: In terms of the factors that go into whether or not strip reserves can be economically mined, are there factors involved other than the thickness of the coal seam and the height of the overburden?

A There are many factors involved; that is why it is very difficult at this time to make any statement as to whether or not certain coal reserves can be coal mined or not.

MR. HEDLUND: I have no further questions.

* * * *

[3]

EXCERPTS FROM DEPOSITION OF
LEON KING, TAKEN MARCH 25, 1969

* * * *

LEON KING,

called as a witness by the defendants herein, having been by me, the said Claud W. Youker, Jr., as notary public aforesaid first duly sworn, was examined upon oral interrogatories and he did thereupon depose and testify as follows:

DIRECT EXAMINATION

BY MR. KEMPF:

Q Please state your name, sir.

A Leon King.

Q What is your home address, Mr. King?

A 1700 West Copeland.

Q In what city?

A Marion, Illinois.

Q Are you appearing for your deposition this morning pursuant to a subpoena, Mr. King?

A Yes, sir.

Q By whom are you employed?

A Barbara-Kay Coal Corporation.

Q What is your business address?

[4] A Manager or President of the company.

Q What is the address?

A 397, Marion, Illinois; Box 397.

Q What is your position presently with Barbara-Kay?

A President.

Q How long have you been in the coal business, Mr. King?

A It will be 30 years.

Q When did you first start in the coal business?

A When I was eighteen.

Q Has most of your time been spent with the Barbara-Kay Coal Company?

A Yes, sir.

Q What positions have you held with Barbara-Kay?

A Well, face boss, mine manager, mechanic, everything there is to do in a coal mine.

Q Have you accumulated a considerable amount of knowledge, experience and expertise in mining and selling coal during your years in the coal business?

A I think so. I should have, anyway, over [5] the period of years.

Q How many mines does Barbara-Kay operate?

A One.

Q How many employees does the company have?

A Twenty-nine union men.

Q How many of these are underground miners?

A Sixteen.

Q Approximately how many tons of coal does Barbara-Kay produce each year?

A Approximately 100,000 tons a year.

Q What seam are you mining in, Mr. King?

A Number 5.

Q Is the Barbara-Kay a deep mine or a strip mine?

A An underground deep mine.

Q Approximately how deep is the coal you are mining?

A At the shaft it is approximately a hundred feet, and where we mine, it's close to 200 feet.

Further north, back away from the shaft, it's deeper.

Q What do you estimate the remaining coal reserves at the Barbara-Kay coal mine to be?

[6] A Anywhere from eight to ten years.

Q Do you have rail loading facilities at your mine, Mr. King?

A No, sir.

Q How does the truck move from your mine, then?

A You mean, how does the coal move?

Q Yes.

A By truck, cars, pickups and big trucks.

Q Do you own your own trucks?

A No, sir.

Q How do people secure coal?

A They come in there and want some coal and we load their truck and sell it to them.

Q To whom do you sell your coal?

A Any individual or anybody that comes in and asks for the coal. Mostly local farmers and trade around the business places, some business places.

Q For what purpose do they use the coal?

A Most of it is heating homes.

Q Do you sell any coal to utilities?

A We only sell surplus coal, mostly, to REA, their plant south of Marion.

[7] Q About how far south of Marion is that?

A Ten miles, fifteen maybe.

Q Do you have a washer and sizer out at the Barbara-Kay Mine?

A Yes, sir.

Q How many different sizes of coal does Barbara-Kay make?

A We make a nut coal, an egg coal, and three sizes of stoker coal. The stoker coal is washed. The other is hand picked.

Q The Government is contending in this lawsuit that coal is coal. What do you think of that contention, Mr. King?

MR. FUTTERMAN: Objection.

MR. KEMPF: Do you want to state the basis for your objection?

MR. FUTTERMAN: Yes. The question is devoid of meaning.

MR. KEMPF: I do not understand what your objection is.

MR. FUTTERMAN: I am objecting on the ground that I think you can make that question a little bit more clear.

MR. KEMPF: Let me restate the question.

[8] BY MR. KEMPF:

Q The Government is contending in this lawsuit that coal is coal. Mr. King, I am asking you what you think of that contention.

MR. FUTTERMAN: The same objection.

BY THE WITNESS:

A Well—

MR. KEMPF: Answer the question.

THE WITNESS: Shall I go ahead and answer?

MR. KEMPF: Yes.

BY THE WITNESS:

A Well, coal is not coal. I mean, if the Government thinks coal is coal, if you try to sell any on contracts, why, there's as much difference as daylight and dark in that, because they don't want to buy it that way because you have got to fill out a form about a mile long, analysis, sulfur and all that, and it has to be prepared and washed and cleaned up.

BY MR. KEMPF:

Q Does coal vary a great deal—let me restate the question.

Do various types of coal differ from each other, Mr. King?

[9] MR. FUTTERMAN: I object to that question on the ground it is leading.

BY THE WITNESS:

A Various types?

MR. KEMPF: I will withdraw the question and restate it.

BY MR. KEMPF:

Q Can the coal characteristics which you have just enumerated, such as sulfur and things like that, vary from coal mine to coal mine?

A Yes, sir.

Q Do customers take account of differences such as those you have enumerated when they are buying coal?

A No. The local trade doesn't.

Q What does the local trade use their coal for?

A To heat homes and small business places.

Q Is most of the coal which can be secured by the local trade in this area coal which has characteristics to other coal in the area?

MR. FUTTERMAN: I object to that question on two grounds. It is not only leading, but I do not understand the question.

[10] **MR. KEMPF:** Would the reporter please read the question, and if it is not clear, I will be happy to restate it.

Q (Read by the reporter.)

MR. KEMPF: It is not clear. Let me put it this way.

BY MR. KEMPF:

Q Does most of the coal which the local trade to which you refer buys come from this area?

A (No answer.)

Q In other words, is most of the coal which the local trade uses produced by mines in this area?

MR. FUTTERMAN: Excuse me. Objection. What do you mean by "this area"?

MR. KEMPF: The area in and around Marion, Illinois.

BY THE WITNESS:

A I don't believe I understand the question, either. Is most of the coal mined used around this area?

MR. KEMPF: No.

BY MR. KEMPF:

Q What I am asking is this: With respect to the local trade, to which you have referred—

[11] **A** Yes.

Q (Continuing)—do they buy coal which is produced by mines in and around the Marion area?

A Oh, yes. Because of the hauling, they wouldn't go 25 or 30 miles from here to buy coal, when they could buy it that close.

Q Most of the coal which is produced in this area right around here, that you refer to, is the coal from one mine similar to coal from another mine?

A Number 5 seam is approximately the same.

Q So that someone who is buying for the local trade is interested in securing No. 5 coal?

MR. FUTTERMAN: Objection as leading.

MR. KEMPF: I will withdraw the question.

BY MR. KEMPF:

Q What kind of coal is used by customers who are buying coal for purposes of generating electricity, such as the REA plant to which you referred?

A Well, they want as cheap a coal as they can get, with the highest BTU's.

Q Would a coal which is satisfactory for their purposes always work satisfactorily in the [12] furnaces which the local trade people have?

MR. FUTTERMAN: I object as leading.

MR. KEMPF: Go ahead. Answer the question.

BY THE WITNESS:

A Well, the same vein of coal, but they have to have the fine coal, where the others have to have a larger size. That's the only thing I can answer to that, is that the same coal will work but it has to be a different size. I may not understand your question, I don't know.

BY MR. KEMPF:

Q You stated earlier, Mr. King, that the customers who buy coal for purposes of generating power will buy on the lowest cost per million BTU's.

MR. FUTTERMAN: I do not think Mr. King stated that, and I think the record will accurately reflect what Mr. King stated.

MR. KEMPF: I will ask the reporter to re-read Mr. King's prior answer.

(The record was thereupon read by the reporter as follows:

"Q What kind of coal is used by customers who are buying coal for purposes [13] of generating electricity, such as the REA plant to which you referred?

"A Well, they want as cheap a coal as they can get, with the highest BTU's.")

MR. FUTTERMAN: Would you please read Mr. Kempf's last question, Mr. Youker.

Q (Read by the reporter.)

MR. KEMPF: Thank you for re-reading the answer, Mr. Youker. I will restate my question.

BY MR. KEMPF:

Q You stated earlier that those who purchase coal for purposes of generating power are interested in getting the cheapest coal possible with the highest BTU. My question is, does the BTU capability of coal vary from mine to mine and according to size?

A To the best of my knowledge, yes.

Q Do some furnaces have a higher BTU requirement than others?

A Yes.

Q Will all coals work in all furnaces?

A No, not as far as—I mean, I don't think they will.

[14] Q Another contention that the Government is making in this lawsuit, Mr. King, is that coal mined anywhere in the midwest is in competition, either actual or potential, with all other coal mined in the midwest. I would like your view of this contention, Mr. King.

MR. FUTTERMAN: I object. That calls for a conclusion of the witness on one of the issues to be resolved in this lawsuit.

MR. KEMPF: Go ahead and answer the question, please.

BY THE WITNESS:

A Again, I don't know whether I understood it or not.

MR. KEMPF: I will ask the reporter to read the question, please.

Q (Read by the reporter.)

BY MR. KEMPF:

Q Do you understand the question now?

A No, I don't.

MR. KEMPF: All right.

THE WITNESS: I'm sorry.

MR. KEMPF: I will rephrase it.

[15] BY MR. KEMPF:

Q Is the transportation cost of coal an important factor in selling coal?

MR. FUTTERMAN: Objection to leading the witness.

MR. KEMPF: Answer the question, please.

BY THE WITNESS:

A Yes. It is our great factor.

BY MR. KEMPF:

Q Could Barbara-Kay sell its coal to consumers located in places like Peoria, Springfield, Belleville or towns in Kentucky?

A Well, if there was no mines there close, but our transportation to mines in that direction, we have to go a different direction where there's no mines on account of transportation.

Q How much does it cost to move a ton of coal from the Barbara-Kay Mine to the nearest rail-loading facility?

A Approximately 70 cents a ton.

Q What is the nearest rail loading facility?

A The Missouri-Pacific.

Q Where is that?

A In Marion, Illinois.

[16] Q Does this place your mine at any competitive disadvantage when comparing it to a mine which has rail facilities which run right into the mine?

A Yes. We have the extra trucking cost of delivering it to the railroad.

Q Have you ever had any experiences where this has proved a handicap to you?

A Yes. We had a possible chance of selling coal to the Dundee Cement place, but because of the extra cost of hauling, the 70 cents, we couldn't meet their prices, and I think Old Ben maybe taken it.

Q Does Barbara-Kay compete for the business of utility companies?

A No—well, wait a minute. Compete? You mean, fight for it?

Q Sure.

A No.

Q Why not?

A I can't mine it that cheap, on account of the low seam and small machinery to load the coal.

Q Has there been a decline in the number of small producers such as Barbara-Kay in recent years, Mr. King?

[17] A Yes. There's several out there that started little mines years ago, and I don't know as it was competition, but they worked out, old age and labor problems. They couldn't operate.

Q Is there competition between coal and other fuels such as gas, oil and electricity, Mr. King?

A There sure is. There's an awful big competition now, because they're going to gas and oil in heating homes as fast as they can be put in.

Q Do they also try to convert existing facilities? If someone has a coal furnace in their home at the present time, for example, do you encounter competition from the gas and electric people and oil people trying to get that homeowner to convert to some other form of fuel?

A I think they do. They do some advertising that they do, anyway. There's so much—I don't know, month's free rent or free gas or free this and that. I guess in some advertising they put in that they give them a discount on different electricity things or gas things.

Q Has the problem of air pollution had any effect on the coal industry?

[18] A I think so, yes. It's going to, if it keeps on. It's going to raise the cost.

Q Will the proposed legislation concerning mine safety, if passed, have any effect on the coal companies?

A It'll raise the cost on us.

Q Would someone like yourself, Mr. King, with a great deal of experience and knowledge about operating a deep mine, be able to open a strip mine operation?

A Well, I couldn't open a strip mine operation. I mean, there's just as much difference as daylight and dark between strip and underground, because it's different machinery, different knowledge, altogether different.

Q Would that work the other way also? Would someone whose experience has been limited to strip mining run into similar problems trying to open a deep mine?

MR. FUTTERMAN: I object to that question. It calls for conjecture on the part of the witness.

MR. KEMPF: Go ahead and answer, please.

[19] BY THE WITNESS:

A As far as I know, because I don't know nothing about the strip, and I don't think if he's working in a strip, he would know anything about underground, so it would still be the same way.

BY MR. KEMPF:

Q Now, you have indicated that your mine is producing approximately 100,000 tons of coal per year.

A Yes.

Q Would someone with your experience and knowledge be able to open a deep mine producing a million or two million tons a year?

A Well, I couldn't, and I don't think that anyone else could, because there's just as much difference there as daylight and dark between the small mines and the large mines.

Q Has the fact that both Freeman and United Electric have been controlled by General Dynamics had any adverse effect on the Barbara-Kay Coal Company?

A No. They haven't bothered us one bit. They have helped us in a way, I think.

Q Will there be any adverse effect on the [20] Barbara-Kay Coal Company if General Dynamics is allowed to continue owning both Freeman and United Electric?

A Will there be any what?

Q Adverse effect on your company, if General Dynamics is allowed to continue owning both Freeman and United Electric.

A Not as far as I can see.

Q Would there be any benefit to Barbara-Kay by forcing Freeman and United to operate independently of each other?

A Not as far as I can see.

MR. KEMPF: I have no further questions.

MR. FUTTERMAN: I have a few questions, Mr. King.

CROSS EXAMINATION

BY MR. FUTTERMAN:

Q Mr. King, you testified that Barbara-Kay's production is currently about 100,000 tons per year, is that correct?

A Approximately that.

Q Has Barbara-Kay's production increased over the past five years?

. . . .

[37] BY MR. KEMPF:

Q You testified, Mr. King, that your company, Barbara-Kay, has sold coal in the past to the REA plant just south of Marion.

In the last five years, has Barbara-Kay sold to any other utility?

[38] A Not direct that I know of.

Q What do you mean by that?

A Not direct, like we sell there. There may be some other coal went to it that I don't know about, sold to trucks, you see, and they took it to them. As far as I know, I don't know.

Q Has Barbara-Kay ever sold to the Union Electric Company?

A Union Electric?

Q Yes.

A Not as I know of.

Q Has Barbara-Kay ever sold to Commonwealth Edison Company?

A Not that I know of; not direct, anyway.

Q Would Barbara-Kay have the production reserves—let me rephrase that question.

Would Barbara-Kay have the production and the reserves to be able to bid for the business of Union Electric or Commonwealth Edison or other big utilities?

A No.

Q You mentioned that Freeman had made some truck sales to the local trade during the course of your cross-examination by Mr. Futterman.

. . . .

[3]

EXCERPTS FROM DEPOSITION OF
JOSEPHINE C. BURTON, TAKEN APRIL 14, 1969

.
JOSEPHINE C. BURTON,

called as a witness by the defendants herein, having been by me, the said Frances B. Spina, as Notary Public aforesaid first duly sworn, was examined upon oral interrogatories and she did thereupon depose and testify as follows:

DIRECT EXAMINATION

BY MR. IRVING:

Q Will you please state your full name.

A Mrs. Josephine C. Burton.

Q Mrs. Burton, what is your current home address?

A 6819-A South Prairie.

Q What city is that?

A Chicago 60637.

Q Are you appearing for this deposition this afternoon pursuant to subpoena?

A Yes.

Q Mrs. Burton, by whom are you employed?

A General Services Administration, Federal Supply Service, Procurement Branch.

[4] Q Is that a division of the United States of America, the Federal Government?

A Yes, it is.

Q What is your office address?

A 219 South Dearborn, Room 1386, Chicago 60604.

Q What position do you hold in the Federal Supply Service?

A I am a Procurement Agent.

Q And how long have you been employed as a Procurement Agent?

A As a Procurement Agent, four years—rather, two years. Two years as a Procurement Agent.

Q And how long have you worked for the Federal Supply Services?

A Ten years.

Q What is the nature of the work performed by you as a Procurement Agent, Mrs. Burton?

A Well, we contract for certain supplies within Region 5, which is comprised of Illinois, Michigan, Indiana, Kentucky and Ohio.

Q Is that Region 5?

A Region 5.

[5] Q Of the GSA?

A Right.

MR. IRVING: I ask the Reporter to mark for identification, as Burton Deposition Exhibit 1, a document entitled "Solicitation, Offer, and Award Contract GS-05S-4945" issued August 1, 1967, and covering a contract for the purchase of coal through June 30, 1968.

(The document was thereupon marked Burton Deposition Exhibit 1 for identification, 4-14-69.)

BY MR. IRVING:

Q Mrs. Burton, I will hand Exhibit 1 to you and ask if you recognize this.

A Yes, I do.

Q Have I correctly described this document?

A Yes, you have.

MR. IRVING: I ask counsel for plaintiff if the standing stipulation with regard to documents will apply.

MR. FUTTERMAN: Not at this time.

[6] BY MR. IRVING:

Q Now, Mrs. Burton, is this the most recent solicitation and award for coal purchased for this building, Item 12, United States Courthouse and Federal Office Building here in Chicago?

A Yes. This is the last procurement.

Q Did you prepare this Solicitation, Offer, and Award document, Mrs. Burton?

A Yes, I did.

Q I ask you to please turn to Page 18 in this docu-

ment. Under Item No. 12 the code name for this building is an entry entitled "Analytical Limits," and one entitled "Size Required."

When you were preparing this solicitation, Mrs. Burton, from whom did you secure these analytical limits and size requirements which Public were incorporated into the solicitation-offer?

[7] A From the Public Building Facility, the Public Building Office, Operations Branch.

Q Is that also a branch of the General Services Administration?

A Yes, it is.

Q Mrs. Burton, does the solicitation to bid state what would happen if someone submitted a bid which did not meet one of the analytical limits set forth in this invitation?

A Yes. If you will notice on page 6, I believe it is, at the bottom of the page, it says:

"BUREAU OF MINES ANALYTICAL RECORDS: (a) No bid will be considered on coal offered from mines on which the Bureau of Mines does not have analytical records. (b) Whenever the bidder's guaranteed analysis of coal offered or the latest Bureau of Mines analysis of the coal offered shows the offered coal not to be in conformance with the specifications set forth in this Invitation, the bidder's offer shall be rejected as being non-responsive."

Q Thank you.

[8] Do you verify the specifications which an offeror will contain in his bid?

A Yes, we do.

Q With whom do you do that?

A Bureau of Mines.

Q Just to make it clear, does the invitation specify what will happen if the Bureau of Mines reports that the coal from the mine in question does not meet the analytical limits contained in the bid invitation?

A The same paragraph "Bureau of Mines Analytical Records" applies.

Q And what page is that on, please?

A On page 6.

MR. IRVING: I have no further questions at this time.

CROSS EXAMINATION

BY MR. FUTTERMAN:

Q Mrs. Burton, I have a few questions I would like to ask you on cross examination.

Would you please turn to the cover of Burton Deposition Exhibit No. 1.

A Yes.

. . . .

[3]

EXCERPT FROM DEPOSITION OF
JOHN P. NIX, TAKEN APRIL 14, 1969

* * *

MR. FUTTERMAN: At the request of counsel for the defendants, counsel for the plaintiff will stipulate to the authenticity and genuineness of those documents covered by this stipulation as hereafter from time to time described and identified, and will not object at trial to the admissibility of such documents on the grounds that counsel for the defendants has failed to prove the authenticity or genuineness of the documents, and that it was in fact prepared and received by individuals named in the document. The right to object to the admission into evidence on any other grounds for such documents is specifically reserved.

MR. KEMPF: It is so stipulated.

Will the Reporter please swear the witness.

(The witness was thereupon duly sworn.)

JOHN P. NIX,

called as a witness by the defendants herein, having been by me, the said Frances B. Spina as Notary Public aforesaid first duly sworn, was examined upon oral interrogatories and he did thereupon depose and testify as follows:

[4]

DIRECT EXAMINATION

BY MR. KEMPF:

Q Please state your name.

A John P. Nix.

Q What is your home address, Mr. Nix?

A 1052 South Edson Avenue, Lombard, Illinois.

Q Are you appearing for your deposition this afternoon pursuant to a subpoena, Mr. Nix?

A Yes.

Q By whom are you employed?

A General Services Administration.

Q Is that a branch of the Federal Government?

A Yes.

Q Where are your offices?

A Room 1186, 219 South Dearborn.

Q In what city?

A Chicago.

Q What branch of the General Services Administration are you with?

A I am with the Public Building Service, Building Management Division.

Q Could you describe briefly for us your [5] duties, Mr. Nix?

A Yes. I am a building management officer, responsible for the physical plant and crafts operations in Region 5, General Services Administration.

Q What is Region 5?

A Region 5 consists of the six states: Illinois, Indiana, Kentucky, Ohio, Wisconsin and Michigan.

Q For how many years have you been involved in this type of work?

A Three.

Q And for how many years have you been with the GSA?

A Five.

MR. KEMPF: I hand the Reporter a document entitled "Term Contract Ordering Data for: "FSC Group 91 Fuels, FSC Class 9110—Coal, Veterans Administration Facilities and Federal Public Buildings, within the states of Illinois, Indiana, Kentucky, Michigan, Ohio and Wisconsin," for the effective period of the date of award through June 30, 1968.

I ask the Reporter to mark this as Nix Deposition Exhibit No. 1 for identification.

[6] (The document was thereupon marked Nix Deposition Exhibit 1 for identification, 4-14-69.)

BY MR. KEMPF:

Q Mr. Nix, I hand you what has been marked as Nix Deposition Exhibit No. 1 for identification, and I ask you if you recognize it.

A Yes, I do.

Q Have I correctly described the document?

A Yes, you have.

MR. KEMPF: I ask counsel for the plaintiff whether the standing stipulation will apply to this document.

MR. SIMS: Not at this time.

BY MR. KEMPF:

Q Mr. Nix, did you participate in the preparation of some of the data set forth in this document?

A I did.

Q Please turn to Page 14 of the document.

You will note that Item 19 is identified as the U. S. Courthouse and Federal Office Building, 219 South Dearborn Street, Chicago, Illinois.

Did you participate, Mr. Nix, in the [7] preparation of data set forth in Item 19?

A I did.

Q What data would that be, Mr. Nix?

A The data shown in the column marked "Estimated Quantity," and the data shown in the column marked "Size Offered" and "Guaranteed Analytical Limits."

Q What do the figures represent that are set forth in the column titled "Size Offered" and "Guaranteed Analytical Limits"?

A They represent the specifications for the coal involved.

Q By "involved" are you referring to that facility identified in Item No. 19?

A For this particular facility.

Q How were these specifications arrived at?

A By contacting the equipment manufacturer of the boiler-stoker equipment for his recommendations regarding the type of coal to be used, and by our experience in burning various types of coal. That is it, for this particular one.

Q You say "for this particular one." What other factor might enter into that?

A Subsequent to the date that this was [8] issued, regulations were issued limiting the sulphur content,

which were not in existence at the time that this particular specification was prepared.

Q I see. Thank you.

Is a great deal of care taken in the preparation of these specifications?

A Yes.

Q Turning to the individual specifications, Mr. Nix, I notice that one of them refers to 3/4" mesh washed screenings. Why is that particular specification used?

A This is the most suitable size coal for the particular boiler.

Q What type of a boiler is this?

A It is a Combustion Engineering high pressure water tube boiler, with a chain grate stoker.

Q Might this particular specification be different if the facility had some other type stoker or a pulverizer?

A It might.

Q I note that another of the specifications is for a minimum ash softening temperature [9] of 2,130 degrees Fahrenheit. Why wouldn't a coal with a lower ash softening temperature—

MR. SIMS: Objection, counsel. I don't think anyone has explained the initials.

MR. KEMPF: All right, counsel.

BY MR. KEMPF:

Q What are the initials A.S.T.? What do they stand for?

A Ash softening temperature.

Q And what does the initial F. stand for, after 2,130 degrees?

A Fahrenheit.

Q Why wouldn't a coal with a lower ash softening temperature than that specified be used at this facility?

A Coal with a lower ash softening temperature might tend to cause problems on the grates, due to excessive clinkering or melting of the ash.

Q Do different pieces of equipment have different coal specification requirements?

THE WITNESS: Would you rephrase—

MR. KEMPF: Do you want me to rephrase that?

THE WITNESS: Yes. "Different pieces of [10] equipment," I am not too sure what you mean.

BY MR. KEMPF:

Q When I say "different pieces of equipment," I am referring to the different types of fuel burning equipment at the different facilities which are set forth as separate items on this schedule, and my question is:

Do the different types of equipment or pieces of equipment which are used at the various facilities have different specifications for the coal which is burned there?

MR. SIMS: What type of fuel facilities, counsel?

MR. KEMPF: The ones set forth in this schedule.

MR. SIMS: I don't see any fuel facilities set forth in the schedule.

MR. KEMPF: Well, Item 19 refers to one facility, which is the United States Courthouse and Federal Office Building, and if you will look at the next—

MR. SIMS: That is the destination point.

BY MR. KEMPF:

Q Mr. Nix, do the size offered and guaranteed [11] analytical limits refer to fuel consumed at the destination designated in the second column?

MR. SIMS: That is leading, counsel.

MR. KEMPF: No, it is not. It is just a straightforward question.

Please answer, Mr. Nix.

BY THE WITNESS:

A Yes, they do.

BY MR. KEMPF:

Q Now I will get back to my prior question, and my question is this:

Do the different pieces of equipment for the consumption of fuel at different facilities have different coal specifications?

MR. SIMS: That type of fuel, counsel? Is this equipment that can use any type of fuel at the facilities?

MR. KEMPF: I am referring to the facilities referred to in this exhibit, and this exhibit states on its cover it refers to FSC Class 9110—Coal.

MR. SIMS: It refers to coal supplied to the different facilities, but it doesn't discuss the equipment used in the facilities.

[12] MR. KEMPF: Mr. Nix has testified previously in his testimony—the record will show exactly the words he used—that these particular specifications, under Item No. 19, for example, relate to the equipment used at the destination.

MR. SIMS: No. He said they relate to the coal that is to be supplied by the contract.

MR. KEMPF: Yes. And when I asked him where he got them, he made it clear that it relates to the equipment in which the coal is to be consumed.

MR. SIMS: No. He said it depended on several things, and not just the equipment.

BY MR. KEMPF:

Q Mr. Nix, is the coal, referred to in this exhibit, for consumption by the facilities referred to in this exhibit?

MR. SIMS: Objection. No facilities are mentioned in the exhibit.

MR. KEMPF: I will let the question stand.

THE WITNESS: Should I answer?

MR. KEMPF: Yes. If you have forgotten the question, the Reporter will read it.

[13] THE WITNESS: Will you repeat it, please.

Q (Read by the Reporter.)

MR. SIMS: I also object as to a leading question.

THE WITNESS: If I could rephrase the question myself, I could answer it.

MR. KEMPF: Well, let me try it again, if it is confusing to you.

BY MR. KEMPF:

Q Does each item in this exhibit, such as Item 19 which we have been discussing, refer to a Veterans Ad-

ministration facility or Federal public building at which coal is consumed?

A Yes.

Q And at each of these facilities is coal consumed in a piece of equipment designed for the use of coal?

A Yes.

Q Do different pieces of equipment at different facilities have different specifications for the coal which they consume?

A Yes.

Q Can that be seen by comparing the data set forth in Item 19 with the data set forth in [14] other items?

MR. SIMS: That is a leading question, counsel.

MR. KEMPF: I ask the witness to answer the question.

Do you want me to restate the question?

THE WITNESS: Will you repeat it, please?

MR. KEMPF: Yes.

BY MR. KEMPF:

Q Can that be seen by comparing the data set forth in Item 19 with the data set forth under other items?

A Yes.

Q When you are considering possible changes in specifications for a particular facility, do you seek expert advice?

A Yes.

Q From whom do you seek that?

A The equipment manufacturer.

Q Would you ever merely drop the specifications and order coal without regard to its characteristics?

MR. SIMS: Objection as leading.

MR. KEMPF: Should I have the Reporter [15] re-read the question?

THE WITNESS: I know the question, but do I answer or not?

BY THE WITNESS:

A No. We wouldn't buy coal without a specification.

MR. FUTTERMAN: Could I have that question read back, please, and the answer.

(The record was thereupon read by the Reporter as above recorded.)

MR. KEMPF: I hand the Reporter a document titled "Term Contract Ordering Data for: FSC Group 91 Fuels, FSC Class 9110—Coal, Veterans Administration Facilities and Federal Public Buildings, within the states of: Illinois, Indiana, Kentucky, Michigan, Ohio and Wisconsin, effective period: July 1, 1968 through June 30, 1969," and ask the Reporter to mark this as Nix Deposition Exhibit No. 2 for identification.

(The document was thereupon marked Nix Deposition Exhibit 2 for identification, 4-14-69.)

[16] **BY MR. KEMPF:**

Q Mr. Nix, I hand you what has been marked as Nix Deposition Exhibit No. 2 for identification, and I ask you if you recognize it.

A Yes, I do.

Q Have I correctly described the document?

A Yes, you have.

MR. KEMPF: I ask counsel for the plaintiff whether the standing stipulation may apply to this document.

MR. SIMS: Not at this time.

BY MR. KEMPF:

Q Mr. Nix, I note that the U.S. Courthouse and Federal Building referred to as Item 19 in Nix Deposition Exhibit No. 1 is not referred to in Nix Deposition Exhibit No. 2. Why is that, Mr. Nix?

A The reason it is not shown in Exhibit No. 2 is that the boilers at the U.S. Courthouse in Chicago were converted to combination gas-oil burners, and the use of coal was discontinued.

MR. KEMPF: I have no further questions.

MR. FUTTERMAN: We would like a short recess.

MR. KEMPF: Fine.

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[3]

EXCERPT FROM DEPOSITION OF
ALDO P. BRAZZALE, TAKEN APRIL 14, 1969

. . . .

ALDO P. BRAZZALE,

called as a witness by the defendants herein, having been by me, the said Frances B. Spina, as Notary Public aforesaid first duly sworn, was examined upon oral interrogatories and he did thereupon depose and testify as follows:

DIRECT EXAMINATION

BY MR. IRVING:

Q Please state your full name, sir.

A Aldo P. Brazzale.

Q Mr. Brazzale, what is your current home address?

A 11604 South State Street, Chicago, Illinois.

Q Are you appearing for this deposition this afternoon pursuant to a subpoena?

A Yes.

Q By whom are you employed, Mr. Brazzale?

A By the United States Government.

Q What is your office address?

A 219 South Dearborn Street, Chicago, [4] Illinois.

Q For which branch or department of the United States Government do you work?

A The General Services Administration, Public Building Service, Design and Construction Division, Design Branch.

Q Mr. Brazzale, what position do you hold in the Design and Construction Division of the Public Building Service of GSA?

A I am supervisory mechanical engineer.

Q Would you briefly describe your duties as supervisor and mechanical engineer with the Design and Construction Division?

A We are responsible for the design of mechanical systems which go into the Federal buildings in our region, Region 5.

MR. IRVING: I ask the Reporter to mark for identification, as Brazzale Deposition Exhibit 1, a document entitled "Heating Fuel Economic Analysis" for the Federal Office Building and United States Courthouse, Chicago, Illinois.

(The document was thereupon marked Brazzale Deposition [5] Exhibit 1 for identification, 4-14-69.)

BY MR. IRVING:

Q Mr. Brazzale, I am now going to hand to you Brazzale Deposition Exhibit 1 and ask you if you recognize it.

A Yes, I do.

Q Have I correctly described this document?

A The "Heating Fuel Economic Analysis," yes.

MR. IRVING: I now ask counsel for plaintiff if they will authorize that the standing stipulation with regard to documents be in effect at this time.

MR. SIMS: Not at this time.

BY MR. IRVING:

Q Was this analysis prepared under your supervision, Mr. Brazzale?

A Yes, it was.

Q For what purpose was this economic analysis prepared?

A For determining the type of fuel to use in the boilers at 219 South Dearborn.

Q By "determining the type of fuel used," could you explain that a little more fully?

[6] A By determining the type of fuel used, this came about due to the requirements which were set down by the Anti-Air Pollution Act. We received authorization to prepare a project for converting the boilers to comply with the Federal Anti-Air Pollution Act, and this analysis was the result of our study.

Q That fuel was the building using at the time the study was initiated?

A Coal.

Q Why was it necessary to undertake this study?

A To comply with the Anti-Air Pollution Act, the criteria set down in accordance with the Anti-Air Pollution Act.

Q Was the fuel the building was currently burning in compliance with that Act?

A No.

Q Did you consider low sulfur coal as an alternative fuel source?

A Yes, we did. We considered the use of anthracite; however, for this area the anthracite does not meet the criteria which has been set down.

Q By "criteria," do you mean the air pollu- [7] tion criteria?

A Yes.

Q Are the figures for anthracite coal contained in the first column, under the heading "Coal" in Brazzale Deposition Exhibit 1?

A Yes.

Q Specifically, Mr. Brazzale, what other fuel alternative did you consider and analyze?

A We considered No. 6 and interruptable gas, year-around gas, and No. 2 and interruptable gas.

Q Would these three alternatives comply with the air pollution control guide lines?

A Using desulphurized No. 6, yes, they would.

Q On the basis of this "Heating Fuel Economic Analysis," which is Brazzale Deposition Exhibit 1, what recommendation did you make?

A We recommended using desulphurized No. 6 and interruptable gas.

Q Why did you make this recommendation?

A Because the annual owning and operating cost of the alternatives considered came out to be [8] less than the other alternatives considered.

Q Mr. Brazzale, is this a standard Federal Government form used for making economic analyses of heating fuel alternatives?

A It is a standard General Services Administration form, yes.

MR. IRVING: Thank you. I have no further questions at this time.

CROSS EXAMINATION

BY MR. SIMS:

Q Mr. Brazzale, you said that you converted the boilers in this building to comply with the criteria of the Anti-Pollution Act. Did you not in fact convert these boilers to comply with an Executive Order that required all Federal installations to comply with criteria set forth in the Anti-Air Pollution Act?

A Yes.

Q Was it the Executive Order that you were following?

A Yes.

Q And this applied only to Federal Installations?

A Yes.

. . . .

EXCERPTS FROM DEPOSITION OF
CLARENCE V. BECK, TAKEN APRIL 16, 1969

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CLARENCE V. BECK,

of lawful age, having been first duly sworn to testify the truth, the whole truth and nothing but the truth in the case aforesaid, deposes and says in reply to oral interrogatories propounded, as follows, to-wit:

QUESTIONS BY MR. IRVING:

Q Please state your name, sir.

A Clarence V. Beck, B-e-c-k.

Q What is your current home address?

A Well, 6012 Clemens Avenue in St. Louis.

Q Are you appearing for this deposition this afternoon pursuant to a subpoena, Mr. Beck?

A Yes.

Q What is your current occupation and position, sir?

A Well, I am President of the Little Dog Coal Company and the Florida Coal Company that have recently operated the Little Dog Mine in Gillespie, Illinois.

Q What is the business address of the Little Dog [3] Coal Company?

A The business address in St. Louis is 4479 Laclede Avenue right at the present time. We just moved.

Q How long have you been in the coal industry, Mr. Beck?

A I have been in it since June 1905. They tell me I am the oldest active member of the industry now in St. Louis.

MR. CUSACK: In St. Louis?

THE WITNESS: Yes. They jokingly refer to me as the dean of the industry.

MR. IRVING: Could you give us a brief description of the various positions you have held in the coal industry throughout the sixty plus years?

A I started in as a coal broker and after a few years I got into the mining business and I have been

in the mining business and the sales business every since about 1915.

Q Have you acquired a great deal of experience and knowledge concerning the coal industry over these years?

A I should have.

MR. FUTTERMAN: I object and move to strike that answer on the grounds the question was leading—and the answer.

MR. IRVING: Mr. Beck, how many mines does the Little Dog operate?

[4] A Little Dog—just one mine and that is the only mine that I have operated in the last fifteen years.

Q Where is this mine located, sir?

A At Gillespie, Illinois, on the Illinois Terminal Railroad.

Q Is that mine still in operation or currently in operation?

A At the present time it's not in operation because the State shut it down on account of an underground fire which led to various financial complications and it hasn't operated since, well, the 27th of November last.

Q I see, sir. Before it closed down what was the average annual production at the Little Dog Mine?

A We got out over four hundred thousand tons for the last several years prior to that time. Four hundred thousand tons a year.

Q Is that mine a strip or deep mine?

A Three hundred fifty feet deep.

Q Mr. Beck, to whom did the Little Dog sell coal?

A Well, we had—our biggest customers were the ones where we had lower transportation costs than most of the competitors. We had a contract with the Staley Manufacturing Company at Decatur for one hundred fifty thousand tons. We had a contract with the City of Springfield for their local [5] power plant that ran approximately a hundred thousand tons. Then we had a general local business in trucks that drove to the mine of thirty to forty thousand tons a year. Then we had some surplus tonnage that we distributed wherever we could.

Q Where would the customers be located for the most part?

A Well, the bulk of our coal was located—was sold more or less local to the Illinois Terminal Railroad and anything recently that we sold that wasn't on the Terminal Railroad was at their terminal docks.

Q For what purposes did these customers buy your coal?

A Well, outside of the small amount of domestic coal that we sold at the mine to the local trade, which was dwindling all the time on account of oil and gas competition, the Staley Company was the biggest individual user. That was, you might call it, industrial coal for process steam. But all the rest of it went to public utilities.

MR. FUTTERMAN: I move to strike those parts of the last answer which were not responsive to your question.

MR. IRVING: Strike that last statement. Mr. Beck, you mentioned that some of your coal went to utilities. For what purpose did they purchase the coal?

A Generally electricity.

Q Did you sell any Little Dog coal in the Peoria area?

A No.

[6] **Q** Why is it, sir, that you never sold coal into Peoria?

A Well, there were local mines up there in the Peoria district that had more advantageous transportation charges than we had. We had no chance to sell coal in the Peoria or Pekin, or that general manufacturing district.

MR. FUTTERMAN: Just a minute, please. Read the answer.

(Answer read by reporter)

MR. IRVING: Mr. Beck, was coal from Peoria sold into the Springfield and Decatur areas?

A I never heard of any.

Q Why is that so?

A Well, that was for the same reason we couldn't reach Peoria, their transportation charges were higher than ours and the rail rates didn't—weren't conducive to shipments and they were too far to truck.

Q To Decatur or Springfield in that area?

A Yes.

Q Have you ever sold any coal in an area such as Joppa, Illinois, Indiana or western Kentucky?

A No. They're out of our geographical area altogether.

Q Why is that, sir?

A Well, our freight rates down there, I don't even know what they are, but they would prohibitive because we would [7] have to cross a lot of other coal fields that are much closer.

Q Are the availability of transportation facilities and location of mines significant factors in determining where a mine can successfully sell its coal?

MR. FUTTERMAN: Object. That question is leading. Please explain also what you mean by "significant," if you choose to use that word in your question.

MR. IRVING: Mr. Beck, do you understand what I mean by the word "significant"?

A I think so.

Q Then please answer the question.

MR. FUTTERMAN: Same objection.

MR. IRVING: Will you like to have the question restated?

A My answer to that would be that coal sales follow transportation arteries and freight rates—now, you asked about Joppa. For instance, Joppa is in the southern end of the State of Illinois and we are in the central part, nearly three hundred miles down there, it's two hundred odd, and there are mines down there in Southern Illinois that cater to that business and have freight rates that are more than a dollar a ton cheaper than we would have. So there would be no chance for us to sell down there.

Q Did the Little Dog sell any of its coal by contract.
[8] A Yes. Yes.

Q To whom? What type of customers did you—

A We had a contract with the Staley Manufacturing Company. We had a contract with the City of Springfield for their local power plant. That is at the time the mine was shut down. Prior to that time we had had contracts with, well, Union Electric at Venice, Illinois Power Company at their federal power plant.

Q Generally how long in duration were these contracts Mr. Beck?

A Well, from one to five years. Five was the maximum. Most of them were one year.

Q Did the Little Dog ever sell any longer term contracts, say ten to twenty years in duration?

A No.

Q Why was that, sir?

A Well, that seems to be a sort of a different business. These people that buy for long-time prediction generally tie up with the big operators that have large reserves.

Q Does coal face competition from other fields like gas or oil?

A Well, it's the—competition from gas and oil is terrific. The fact is oil indirectly, the diesel locomotives, has taken the railroad business and the gas has taken nearly all of the so-called household and smaller business and a considerable amount of the larger business, [9] for instance the gas people are out soliciting big users all the time and they have dump contracts with all of the utilities that take large quantities of gas in the summertime.

Q You testified earlier, Mr. Beck, that you sold some coal to the Venice plant of Union Electric?

A Yes.

Q Did Little Dog sell to any other Union Electric plant?

A No. That was the only one we had advantageous transportation rates to.

Q Are you familiar with the recently enacted St. Louis Air Pollution Ordinance, sir?

A Yes.

Q Has that had an effect on your Venice business?

MR. FUTTERMAN: Object. Leading question.

THE WITNESS: It happened to be that we lost that business right after the Air Pollution Ordinance went into effect on account of the fact that our coal was higher sulphur coal than permitted.

MR. FUTTERMAN: I move to strike those parts of Mr. Beck's last answer which were not responsive to your question.

MR. IRVING: Mr. Beck, did the fact United Electric and Freeman were both controlled by General Dynamics have any adverse effect on the Little Dog Coal Company?

A I couldn't see any.

Q Why is that, sir?

A Well, while we were [10] competitive to the Crown Mine of Freeman we weren't directly competitive to United Electric at any place that I knew. They sold their coal mainly in different places than we did on account of the location of their properties and the transportation costs—the cost to the consumer and so forth. They didn't sell any customers that we directly competed for.

MR. IRVING: I will ask the reporter to mark for identification purposes as Beck Deposition Exhibit 1 a letter dated November 14, 1968, from Mr. C. V. Beck to the Antitrust Division, Department of Justice, Chicago, Illinois.

(Beck Deposition Exhibit 1 marked 4-16-69 TAG for identification)

MR. IRVING: Mr. Beck, I now hand you what has been marked Beck Deposition Exhibit 1 and ask you if you recognize this?

A Yes. That is the letter I wrote.

Q Have I correctly described it, sir?

A Yes.

MR. IRVING: I now ask counsel for Plaintiff if the standing stipulation will apply to this document?

MR. FUTTERMAN: Not at this time.

MR. IRVING: Mr. Beck, would the continued ownership of United Electric and Freeman by General Dynamics have any adverse effect on Little Dog Coal Company?

[11] A Not that I could see, no.

MR. FUTTERMAN: Move to strike the question and answer on the grounds of United States versus Philadelphia National Bank.

MR. IRVING: Would there be any benefit to competition in the coal industry if Freeman and United Electric were required to operate independently of each other?

MR. FUTTERMAN: Object as leading.

THE WITNESS: I can't see any.

MR. IRVING: Would the continued ownership of both Freeman and United Electric have any adverse effect on competition in the coal industry?

MR. FUTTERMAN: Object. Leading. I suggest you ask your questions in such a manner that they are not leading.

MR. IRVING: Please answer the question.

A I don't think so.

MR. IRVING: I have no further questions at this time.

* * *

[17] Q Would you estimate that in 1968 you sold about twenty or twenty-five thousand tons of coal to Commonwealth Edison?

A I would say that.

Q Mr. Beck, isn't it a fact that United Electric and Freeman sell coal to the river generating stations of Commonwealth Edison?

A Oh, yes.

Q Are Freeman and United Electric in competition for that business?

MR. IRVING: Object. Counselor's question is outside the scope of the direct examination.

MR. CUSACK: It is not.

MR. KEMPF: The Court will rule on it and you won't.

MR. CUSACK: Your remarks are uncalled for.

MR. KEMPF: As yours are. Immediately before we went on the record you indicated you hoped that only one counsel from each side would make remarks throughout this deposition. You have interjected remarks which are, in my view, uncalled for.

MR. CUSACK: Why are you talking then?

MR. KEMPF: To get the record straight in that regard.

MR. FUTTERMAN: Would you answer the question, if you recall it? Do you recall my question?

A Oh, yes.

[18] Q Would you answer it, please?

A It's a well known fact that the Crown Mine of the Freeman Coal Company have a contract which takes the bulk of their output with the Edison Company and have, ever since the mine was sunk. That, I believe, goes mostly by the Havana Dock of the C&IM Railroad at the present time, at least. The C&IM of course belongs to the Edison Company and that mine, I have understood, sells about two million tons a year to the Edison Company along with about five million tons of coal that comes from the Peabody No. 10 Mine in the same district. That probably is fifty percent of their take. As far as the United Electric is concerned it's common knowledge that their Peoria District, which is very favorably located to the river, sells a considerable amount, I don't know how much, but nothing like as much coal as the Edison Company, along with all the operators in the Peoria District have some tonnage going into the Edison Company.

MR. IRVING: I move to strike the answer on the grounds it's hearsay. If Plaintiff desires to ask questions concerning Freeman and UEC Coal Company and the Peabody Coal Company, the best person to ask are the coal companies and if they have questions concerning Commonwealth Edison they should properly direct the question to Commonwealth Edison.

MR. FUTTERMAN: Mr. Beck, do you know of your [19] own knowledge that Freeman and United Electric and Peabody sell coal to the Commonwealth Edison Company?

A Well, I know that Peabody and the Crown Mine sell it to them. I understand on pretty good authority that the other—all the Peoria operators district sell some coal to the Edison Company.

Q Mr. Beck, isn't it common knowledge that United Electric sells coal to Commonwealth Edison?

A Well, I think it is, yes.

Q Mr. Beck, isn't it a fact that you sold coal to Northern States Power Company in Minnesota?

A I sold them a few barges, yes. That was complimentary tonnage, spot orders just here or there. We never had a definite contract with them.

Q What was the greatest number of tons that you sold to Northern States Power Company in any one year?

A Well, let me think. I would say twenty odd thousand tons.

Q How many tons did you sell to Northern States Power Company in 1968, approximately?

A We sold them just two or three barges because we were down all summer long.

Q How many tons of coal would that be?

A A barge holds thirteen hundred tons generally.

* * *

[21] Based on your knowledge and experience in the coal industry isn't United Electric one of the substantial coal producers in Illinois?

MR. IRVING: Object. I find that a leading question. Once again you have to define what "substantial" means in this case. We haven't any definition whatsoever.

MR. FUTTERMAN: Answer the question, please.

A They produce several million tons a year. I don't know if—I would give the opinion that the joint properties produce something like four million tons.

Q I am speaking of United Electric alone.

A That's what I'm talking about. That makes them a substantial producer in my opinion.

Q Mr. Beck, are you surprised to learn that the combined production of Freeman and United Electric is in excess of ten million tons?

A No, I'm not surprised. I guess that is pretty close to the figures. It's probably eleven. I don't know if I could pick it out of the air.

Q That would make the two companies combines very substantial producers and independently very substantial producers, would it not?

A Yes. They would be substantial producers.

.

[24] Q Thank you, Mr. Beck. Isn't it a fact, and don't you [25] know it to be a fact that strip coal companies are now removing coal below one hundred fifteen feet of overburden?

MR. IRVING: Object both as outside the scope of the direct examination and concerning questions better asked of strip miners, and based on hearsay testimony in this case.

MR. FUTTERMAN: Would you answer the question, please, sir?

A Well, I read in the trade papers that they are in certain places in the country. I don't know that they're doing that in Illinois as yet.

Q Based on your knowledge and experience in the coal industry do you expect that they will be stripping below the depth of one hundred fifteen feet in Illinois in the near future?

MR. IRVING: Objection. I have a continuing objection to this line of inquiry.

MR. FUTTERMAN: Would you answer the question?

A Well, that's a moot question, difficult to answer. Underground mining methods and machinery are improving so fast that it's just a question now as to whether it's cheaper to go that deep or not. It's possible. Personally I have an idea that underground methods now have improved so much it would be more economical to have an underground mine and a depth greater than one hundred fifteen feet.

.

[27] A In the last, I'll say twenty years, the method of mining underground coal has changed considerably

in the matter [28] of what they call roof bolting and that is where you bolt the roof of the mine, which may be a poor roof, to some rock strata that lays above it, maybe you have to go up to maybe four to ten or twelve feet. That eliminates the necessity for a tremendous amount of wooden props in the mine and it, I would say, enables you to mine poorer condition coal than you would otherwise find it profitable to mine.

Q Is it not a fact that Mr. Kraakevik of the Illinois Power Company told you that he cannot fulfill coal requirements for his Havana plant from Fulton-Peoria coal?

MR. IRVING: Objection.

MR. FUTTERMAN: I would like to state for the record that the Government objects to the continuing harassment of its cross-examination of Mr. Beck.

MR. IRVING: Counsel for Plaintiff has continually gone into areas outside the scope of my direct examination. I ask counsel to desist, however I ask him if he would like to make Mr. Beck his witness at this time.

MR. FUTTERMAN: No. Mr. Beck has been subpoenaed to testify by you, Counsel, and I would like to state this question is not outside the scope of your direct examination nor are the other ones.

MR. IRVING: I'm not going to argue with counsel for Plaintiff on this matter, it's clearly an issue for the Judge [29] to decide, not for us.

MR. FUTTERMAN: All right. Mr. Beck, do you have my last question?

A Yes.

Q Would you answer it, please?

A Well, I will state first that Mr. Kraakevik didn't make that remark to me personally, he made it to my agent, Mr. Coffee. We had been very closely associated with the Illinois Power Company over many years. We had contracts with them for their federal plant here on the Mississippi, we had one five-year contract with them for one hundred fifty thousand tons a year and—but we never had any business regularly from this Havana Plant. We never had any. I understand that originally that—that is the oldest plant the Illinois

Power Company has and it's an Illinois River plant and they had unloading facilities on the Illinois River which they tore out for some reason or other and for the last few years they have been getting coal directly from the Peoria District by truck and those lines there are right across the river. I think there were several of them within, I'll say, twenty miles of the plant. I understand now that they're having difficulty getting supplies from the Peoria District which is a dying district when you come down to it, and they're well sold up all the time and Mr. Kraakevik advised our—my agent that he would be receptive to a [30] proposition to supply that coal from our mine on rail.

Q Isn't it a fact, Mr. Beck, that Mr. Kraakevik told your agent that he would be willing to take Little Dog's entire output for the Havana plant should Little Dog reopen?

A He indicated he would be interested in taking four hundred thousand tons, which is substantially the output.

Q Mr. Beck, is it not a fact that Commonwealth Edison's new plant, Powerton Plant at Pekin, Illinois, will be supplied coal from Humble Oil's new mine near Gillespie, Illinois?

MR. IRVING: Objection. I find that question outside the scope of the direct examination.

MR. FUTTERMAN: I disagree. Would you answer the question, Mr. Beck?

MR. IRVING: It also calls for a hearsay answer.

THE WITNESS: Well, that is published information, yes, that they're sinking a new mine six or seven miles northwest of our mine. It will be a combination rate proposition between the Chicago-Northwestern, the Illinois Terminal, the C&IM, that they will supply coal from that mine to Powerton.

Q It is a fact, then, is it not, Mr. Beck, that Central Illinois Coal will then be moving into the Fulton-Peoria coal district?

MR. IRVING: Objection, same grounds.

THE WITNESS: Well, it's my opinion that it will do [31] some more in the future for two reasons. In the

first place, all of the power companies are increasing rapidly their consumption of coal. They tell you that their load increases eight percent a year and it doubles every ten years. That's about eight percent compounded. Naturally with a large string of power plants along the Illinois River and in the territory, say, at Rockford and Davenport and Madison, Wisconsin and so forth, if their demand for coal doubles in the next ten years from the public utilities Peoria District is a dying coal field, they have about got every pound of coal or acre of coal corraled up there, that the strip mines can ever strip. Consequently the tonnage is actually going down in that field, which, in fact, as a strip area it's a new one. United Electric's Cuba strip was the first one, that's about thirty years old, and all of a sudden they found it was a very favorable stripping area and it is all strip coal now.

Formerly, that coal originally came from the Springfield District of Illinois, Central Illinois, what we are in. If the demand increases and the supply dwindles in Peoria the next people to come—they'll come down to the Springfield area to get the coal some of these days, we hope.

Q Mr. Beck, you supply coal to Union Electric Company's generating station at Venice, Illinois, did you not?

A Yes.

[32] Q Where is Venice located?

A Venice is right across the river here about two miles north of this building.

Q That's practically in downtown St. Louis, is it not?

A Yes, right across the river. It's on the East Side.

Q How many tons did you supply the Venice plant in 1964?

A We had a contract with them for several years, up until 1968, for a hundred thousand tons a year.

Q Who were your competitors for the business of Union Electric's Venice plant?

A Well, the main competitors were Southern Illinois Coal, Freeman Coal Company, Orient Coal was in there. Sahara Coal Company from Saline County was in there.

In fact, that was the one plant of Union Electric that seemed to be an open market plant. They bought that coal on a year-to-year basis, there were no long-term contracts to Venice. That I know of. And there was—we were, I believe, the only Central or Belleville District operator that ever put substantial amount of coal in there recently. The rest of it was what I would call Southern Illinois dust.

Q Now, isn't it a fact that United Electric supplied coal to the Venice plant at Union Electric?

MR. IRVING: Objection.

THE WITNESS: I don't think they did. I never heard [33] of any.

MR. FUTTERMAN: Would you be surprised to learn that United Electric did supply coal to the Venice Plant of Union Electric?

A I wouldn't be surprised. Anybody could ship in there from the Belleville District. They might have shipped some coal in there.

MR. FUTTERMAN: Will counsel stipulate that United Electric has supplied coal to the Venice Plant for Union Electric?

MR. KEMPF: Not at this time.

MR. IRVING: I wish to withdraw my last objection.

MR. FUTTERMAN: Mr. Beck, other than the electric utility generating stations that you have already mentioned, have you supplied coal to any other electric utility generating stations during the past twenty years?

A I don't recollect we furnished anybody other than that that have been mentioned.

Q During the last twenty years, Mr. Beck, did any of your coal move into the Fulton-Peoria District?

MR. IRVING: Objection. Strike that.

MR. FUTTERMAN: You can answer the question now, please.

A I don't know of any, no.

. . . .

[35] Q Mr. Beck, when you were talking about the East Side you were referring to the East Side of St. Louis, is that correct?

A Well, yes. You take the cost is, generally speaking, twenty-five cents a ton higher freight rates to St. Louis. The fact is they changed the freight rate so quick and so many times recently it's hard to keep track of them. Generally speaking, it costs somewhere in the neighborhood of twenty-five cents a [36] ton more from a freight standpoint to St. Louis than the East Side and of course on a truck basis it's a little further to St. Louis than it is to East St. Louis, although practically all of the industrial coal used in the St. Louis area is trucked in here because the truck can run it in here cheaper than the railroads.

Q Mr. Beck, isn't it a fact that the dump or interruptable gas sold by the gas company during the summertime is drying up, to utilities?

A Well, I would say generally speaking that is partly true, yes. It's not as bad as it was five years ago or ten years ago.

Q Isn't that because the gas companies are now storing that gas for use during the wintertime when they can get a higher price for it?

MR. IRVING: Objection. Once again counsel for Plaintiff is calling for hearsay testimony. You have questions concerning the policies of the gas industry I suggest you ask members of the gas industry.

MR. FUTTERMAN: Would you please answer the question now, Mr. Beck?

A Well, it's my opinion that that is a factor. On the other hand, they are—can more easily now—they have more plants—they can dump gas into more than they had [37] originally and they can be a little more selective in their choosing who is going to get the dump gas than they used to be. Between the two factors the dump gas isn't quite the problem it was five years ago or more.

Q Isn't it a fact that the amount of dump gas going to utilities has substantially declined over the last five years?

A I am not sure whether the gas has declined or the utilities' consumption has increased. It isn't quite, apparently, as big a percentage. You can look in the

book and find it out easily by going through the statistics from the Federal Power Commission.

Q Mr. Beck, isn't it a fact that the operations at the Venice Plant of Union Electric Company have been curtailed due to its proximity to the downtown St. Louis area?

A I doubt that. I think that they have been curtailed somewhat on account of the fact it's an older plant and the newer plants, particularly Meramec and Portage are more efficient and they favor those plants when they can. But Venice runs continuously and is a substantial plant. They can burn a hundred cars of coal a day. I think that they—I have never known they didn't burn forty and fifty and I have been over there many times when they're unloading coal and nearly all the coal that I ever saw over there besides mine was either from Old Ben, Freeman or Sahara. It was all Southern Illinois dust.

[38] Q Mr. Beck, did you ever know of any United Electric coal going into the Venice plant of Union Electric?

A Not of my positive knowledge. I never saw any. The fact is I never heard any went in there. It's possible, anybody could put it into Venice. They bought on the open market and everybody but me had the same freight rate.

Q Mr. Beck, isn't it a fact prior to the fire in your mine you could sell all of the coal that you produced?

A Well, we are very favorably located, we didn't run full all the time, but we have for the last several years.

Q Isn't it a fact that your operations were profitable prior to the mine fire?

A Well, they were profitable up till the last several years. The last several years we were in the reconstruction period and we had some financial troubles that—

Q Mr. Beck, in your opinion is there a place in the coal business for the medium-sized producer such as Little Dog?

A He has to be well located and pretty smart, but there is if he is well located. If he is poorly located there isn't any.

Q Were you the last of the medium-sized producers in Illinois?

A Well, from the standpoint of one company, perhaps almost. There is companies that have been going in Southern Illinois that are slightly smaller than I [39] am that seem to be successful. They cater to entirely different markets. Certain companies have individual mines that seem to get along well. I might mention that Bellenzoller's Murdock Mine is probably one of the most profitable mines in the State of Illinois and it's an orphan, way out in the northeast of us, east of Decatur. It's a peculiar situation. The coal trade is peculiar inasmuch as location and transportation charges mean everything.

MR. FUTTERMAN: The Government has no further questions at this time, and thank you, Mr. Beck.

MR. KEMPF: Counsel for the Defendants would like to take a short recess.

MR. FUTTERMAN: I think Mr. Beck would probably appreciate that.

(At this time a recess was had)

QUESTIONS BY MR. IRVING:

Q Mr. Beck, in your sixty years in the coal industry have you ever operated a strip mine?

A No.

Q Do you consider yourself to be an experienced strip miner?

A No.

Q Do you consider yourself an expert on strip mining?

A No.

. . . .

[2]

EXCERPTS FROM DEPOSITION OF
WINFORD C. PETERSON, TAKEN APRIL 18, 1969

WINFORD C. PETERSON,

called as a witness by the defendants, being first duly sworn by the Notary Public (Richard Kaufman), and stating his address as 373 Stanwich Road Greenwich, Connecticut 06830, testified as follows:

EXAMINATION BY MR. KEMPF:

Q Will you please state your name?

[3] A Winford C. Peterson.

Q What is your home address?

A 373 Stanwich Road, Greenwich, Connecticut.

Q Are you appearing for your deposition this morning pursuant to subpoena, Mr. Peterson?

A I am.

Q Could you please tell us by whom you are employed?

A I am employed by National Oil Fuel Institute which is commonly known as NOFI.

Q What is your business address?

A We are located at 60 East 42nd Street, New York.

Q What is your present position with the National Oil Fuel Institute?

A I am the president.

Q How long have you been in the oil industry, sir?

A My father died in 1933 and I came home out of college that night and took over the family business as a jobber and I operated that business from 1933 into 1941 at which time I became a commission agent for the Standard Oil Company of Nebraska and I was in that work for a period of time until World War II came along and I went into World War II for about three years and when I [4] came back I was called back to Omaha, the headquarters for the Standard Division, which in the meantime Standard of Nebraska had been bought out by Standard of Indiana while I was away to the Army, so

I came into the headquarters working as their special representative for training and then I went through a series of jobs touring through the company, roughly two to three years on each position until the Korean War came along and I went back to Korea from 1960 to 1962, for about almost two years.

Q You said 1960 to 1962?

A 1950 to 1952.

After that I came back for a short period of time in the Omaha office as the sales manager for the State of Nebraska in the consumer end of the business which includes bulk plant and tank wagon operations, fuel oil, gasoline, farm products, primarily.

I went to the Chicago general office and again I went through a progression of positions there until just this last year I was invited to become the president of NOFI and I accepted that position and came here to New York.

Q When was NOFI founded, Mr. Peterson?

A It was founded in 1961 by a merger of the National [5] Fuel Oil Council and the Oil Heat Institute of America.

Q Approximately how many NOFI members are there?

A NOFI is a troika. It consists of three divisions. There are 7000, roughly 7000 dealer-distributors or jobbers. There are 20 refining oil companies in the Refining Division and there are 80 burner equipment or controls equipment people in the Equipment Division. That is the size of the membership.

MR. GRUBERG: It is called the Manufacturers Division?

THE WITNESS: Yes, our Manufacturers Division.

Q How many states does the NOFI Distributor and Dealer Division operate in?

A We operate in 26 states which are basically the East Coast states and the Midwest.

Q What is the daily average total distillate heating sales volume in the 26 areas that the NOFI members serve?

A 1.3 million barrels a day. * * *

Q And what per cent of that volume are NOFI members selling and servicing?

A About 70 per cent.

[6] **Q** What sort of functions does NOFI perform?

A NOFI is dedicated to the proposition of developing oil growth services for its members, the growth of oil in the energy market.

Q In what various forms or how is this effected?

A Well, we have advertising and promotion. We devote ourselves to the research and development, equipment research and development, educational programs, PR, government liaison and technical services.

Q What has been the approximate size of NOFI's budget in recent years?

A About \$5 million a year.

Q Are the States of Illinois, Indiana, Iowa, Wisconsin and Minnesota included in the 26 states where NOFI operates?

A They are.

Q What is the overall objective of the oil market growth services which NOFI performs for its members?

A Well, our objective, of course, is to increase the oil share of the energy market.

Q Does oil compete with other fuels such as gas, coal, nuclear fuel for the business of utility companies?

MR. EISEN: That is objected to. It is leading and suggesting an answer to the witness.

[8] **MR. KEMPF:** There is no suggestion at all. I am asking him for the answer and he has a number of options.

MR. EISEN: You mean—

MR. KEMPF: He has a range of answers that can be totally inconsistent. He can say yes or no.

MR. EISEN: There is a range of answers from yes to no, I suggest.

MR. KEMPF: Or if the witness wishes to expand, I certainly hope he will do so.

I will restate the question at this time since we engaged in a soliloquy, not a soliloquy, a dialogue.

BY MR. KEMPF:

Q Does oil compete with other fuels such as gas, coal and nuclear fuel for the business of electric utility companies?

MR. EISEN: I will object to that question. It is not specific. It calls for an opinion and conclusion of the witness. There is no indication whatsoever—there is no proper foundation which has been laid for that question and further I would suggest that you ask him for facts rather than conclusions.

MR. KEMPF: That is precisely what I am [9] doing.

Q You may answer the question, Mr. Peterson.

A Yes, it does compete, and it varies, of course, in different areas. In New England Oil has 50 per cent of the business of the electric utilities.

Q What about electric company utility business in the Midwest?

A Well, they don't do so well in the Midwest. Coal and gas have most of that business. However, that is at the present time and that has varied over a period of years and probably could vary again.

It is important to know that most all utilities have dual or triple fuel capabilities and this is a device they use to be sure they play one energy source against the other to keep their costs for fuel low.

Q Approximately how much oil is sold to midwestern utilities each year at the present time?

MR. EISEN: I will object to that question. There is nothing indicated by this witness' prior testimony that he can answer that question.

There are documents in industry sources which are the best evidence with regard to oil consumption by utilities in the Midwest.

[10] Furthermore, there is no delineation of the term Midwest in your question, at least not which I would understand.

MR. KEMPF: If counsel will review the record upon receiving it, I think he will find by examining Mr. Peterson's testimony up to this point in the deposition, that he is eminently well qualified based on a lifetime of expe-

rience in this industry to answer this question and I ask him to do so at this time.

A Well, obviously when I knew I was going to have to make a deposition I rechecked my experience and at the present time it is about a million barrels a year that goes to electric utilities in the Midwest.

Q About what per cent of that is solely utilities located in Illinois?

A About a fourth of it.

Q Does oil compete with coal for the industrial and commercial market in the Midwest, Mr. Peterson?

A In that area, the competition is more intense. Oil has about 20 per cent of that market. Coal has about 35 per cent and gas has practically all the rest.

Q Does oil compete with coal and other fuels for the apartment and home heating market in the Midwest?

[11] A It is even more intense here. Yes, it certainly does.

Gas has over 50 percent of that business and oil has about 30 per cent.

Coal has about 10 per cent and electricity has only 2 per cent in the Midwest. It is by far the fastest growing and the biggest threat to me as an oil man.

Q Do NOFI's midwestern members attempt to persuade consumers presently using coal for heating purposes to convert to oil?

A They certainly do. Frankly that has been the easiest target for them, their success in converting coal users to oil is probably responsible for the present level of oil penetration in this market.

Q Does NOFI expect competition between coal and oil to continue in the years ahead?

MR. EISEN: That is objectionable as leading, suggesting an answer and further at this time I will move to strike all testimony of this witness with regard to statistics and with regard to characterization of competition as not being the best evidence.

Q You may answer the question, Mr. Peterson.

[12] A Would you repeat it?

Q Does NOFI expect competition between coal and oil to continue in the years ahead?

A I think that is obvious. We certainly do. Although, based on what my opinion is and what I also read in other publications, I would give it about somewhere between five and ten years, coal as a viable competitor in that direct market, but I think oil and gas will have completed most of the conversion from coal in that particular market in that period of time.

However, coal will continue to be a very tough competitor since that is the basic source for electricity, the secondary thing. You have energy by wire, so coal will be very much a competitor but in a secondary form.

Q How do you account for this, Mr. Peterson?

A Well, the electric industry has two primary targets for expansion. One is the home heat market and the other is the transportation field.

It is my personal opinion that they really can't get into the nuclear ring until they develop much greater loads within the geographical area where they have franchise status as the average home uses 5000 kilowatts a year for illumination and typical appliances, but if they go home heat, they quintuple their load, it [13] goes to 25,000.

It is important to them, if they are going to expand, if they are going to take advantage of nuclear energy since they are restricted by geographical boundaries, that they get this load and, of course, they are looking for cheaper fuel costs via nuclear fuel, but they have to have the load in order to justify it.

I think that you are going to see a tremendous effort on the part of the electric utilities to capture this home heat market and to expand their efforts.

Right now if you are from Chicago and most cities, Commonwealth Edison out there almost any night you turn on the television set, you would see commercials from these people and one of the themes and unfortunately it is a pretty tough theme, they are saying electricity is the only fuel that will be as modern when you pay off your mortgage as it is today.

They are going to be real tough in this business. That is their immediate area of expansion. They have to get that under their belt before they can invade the transportation market.

Q How are the electric utilities able to devote the resources to promoting home heating by electricity, Mr. Peterson?

[14] **A** They spend about \$500 million a year combined in promotion and advertising and this is made possible by a Supreme Court ruling which was handed down some time ago which said that promotional expenditures up to 3 per cent a year were justified in the best long-range interest of the ultimate consumer.

By that they said line economies resulting from an expansion of the market and by development of new burning equipment, while it might cost the consumer more today, eventually would cause an economy in the fuel and are justified.

Further, under regulatory law, they are permitted to grind these \$500 million each year back into the rates.

My group resists because here is a case where they are using monopoly status, the illumination area which carries part of this \$500 million load, to generate funds to invade a non-monopoly area where they are in competition with us for heating oil and these kind of things and our position is this is immoral and illegal.

MR. EISEN: At this point—I have no quarrel with the witness' description of what his position has been and is and possibly we can even [15] stipulate there is this war going on between the electric utilities and the oil industry, but I fail to see the relevance of that kind of thing to this case and I object to it for the reason it encumbers the record in this case and it is a different level of distribution entirely from the one that is involved in the complaint.

MR. KEMPF: That, of course, the judge will rule on. He will also rule on the impact that this may have on the matters raised by the issue filed by the Department of Justice in its complaint.

Q Mr. Peterson, have the electric utilities succeeded in capturing a large share of the home heating market?—

A They haven't yet, but again, you need to always look at shares with the understanding what is here today may not be here tomorrow and definitely wasn't here yesterday.

They have, as I said before in the Midwest only about 2 per cent of the market presently but they are the fastest growing and as you look at the curves and you look at what is happening, our feeling is that they are the No. 1 problem that the oil industry has to face and we are going to have to do something to counter the [16] things they are doing so successfully and really we feel the use of the utility subsidy thing, really buys the business and until we can stop that and until we can get the choice of fuel based on just the pure economics of the fuel itself, that we are going to have real trouble, but once we can get that done and remove that as an exclusive weapon so it is available for us to meet, then when that happens and the consumer must decide just on the economic merits of the fuel, then oil will improve radically and electricity won't make the goals they are projecting now.

Q Will the prices which the electric utilities must pay for their fuel requirements affect their ability to continue to expand the electricity share of the home heating market?

MR. EISEN: I would like that question.

(The question was read.)

A That seems obvious to me and it is pretty basic to the business. The cheaper their source fuel, the more competitive. The higher, the less competitive it will be.

Q Does NOFI have any programs planned that will make oil more competitive in the future?

A That is the real reason why I came to this job. [17] Booze, Allen & Hamilton—

MR. EISEN: That question is not clear to me.

Competitive in sales to utilities or sales to consumers or to whom?

MR. KEMPF: This particular question I am focusing on the area we have just been talking about and that is the home heating market.

Q Did you understand the question to be referring to that?

A Would you please repeat it?

Q Does NOFI have any programs planned that will make oil more competitive for the home heating market in the future?

MR. EISEN: Competitive with what?

MR. KEMPF: With the other fuels that Mr. Peterson has been testifying about.

MR. EISEN: You mean like electricity?

MR. KEMPF: Yes.

A Electricity and gas and coal, although coal is a small part of our problem now. We think we are going to phase coal out from the rest of the fuels before too long.

Booze, Allen & Hamilton made a study of the needs [18] of the oil industry then they brought me in as president to implement that plan and we have done our own planning and this has resulted in the 80 million program; as it is commonly known as, and this is a program designed specifically at changing oil's share of the energy market and to make us much more competitive against all forms of competing energy sources particularly for the home heat market.

Q Will a portion of these expenditures you have referred to as the \$80 million plan be allocated to advertising?

A Yes. We retained a national advertising agency, NOFI prior to this time, presently, does not have a national campaign and we need it badly because we feel that oil's image has been made for it by the huge expenditures of the utilities, both the gas people and the electric people, and we started that work by commissioning Jack Tinker and partners, our new national agency, to make a study of the 26 states on a county-by-county basis and to determine what level we need to reverse this trend.

Q Approximately how much do you anticipate allocating to advertising?

A Well, based on their advice to us, at a \$21 million a year level, oil heat would have the loudest [19] voice

of any brand in the 26 states and since we have to turn the boat around and overcome inertia, that is what I am recommending and that is what we are striving to get that level to begin with.

Q What leads you to believe that these advertising programs will be successful?

A We have had experience, probably the most outstanding is what happened in Nassau and Suffolk County in nearby Long Island.

During the period, five-year period prior to 1961 when NOFI was formed, utilities moved in there and during that period they got 62 per cent of all the new homes, utility fuels. This was a former stronghold of oil heat.

NOFI was formed in 1961 and the Long Island group is a very aggressive group and participated with a vital advertising program and during that next five years, they reversed that trend. In fact, the utilities dropped from 62 per cent of the new home starts to 25 per cent and, as a matter of fact, during those five years, this is the last five years after the NOFI advertising program which was so effective while in operation, oil captured 120,000 homes and during that same period, the utilities captured only 28,000. I think that is very significant.

[20] Q Will a portion of the \$80 million be devoted to research and development?

A Yes, it will.

Q Approximately how much?

A Well, we have needs for a lot more money but from a practical standpoint, we don't know how to gear up in the first year or two to spend more than one or two million a year. We check with the gas people. They are spending about \$10 million a year for two objectives, on R&D. One is to improve their burning equipment and the other is to find new uses for gas.

When we go to the electric people it is more difficult because of the inter-action of the budgets of Westinghouse and General Electric, but our best estimate is they may be spending in the area of \$40 million a year on these same things. We are going to do a lot of work, we have to.

Q What sort of things do you hope to develop?

A Well, one of the things that we want to develop are sophisticated central systems, for example, in a mobile home park and in whole new housing developments, we would set up centralized storage with pipelines running right into the basement of the home owner. Instead of having a tank there we would have a meter. We would [21] take a page out of the gas and electric people's books. That is one of the things we would do.

We have a lot of work to do on what is known as total energy plants. In big installations there are economic incentives for having a totally oil powered facility which generates its own electricity, which provides heat, which provides the cooling. Since the capital requirements are great, it is impractical for any individual company or any individual dealer to finance these things because under the free enterprise system that oil operates under, they can spend all this money to kind of build a nest and there is no assurance they will lay the eggs in it, anybody else could come in and do it.

As an association, our goal is to save these units for oil and to get oil equipment installed and then anybody, of course, it is just another oil using unit and free enterprise works and anybody can come in and deliver there.

We also need to do some things to improve burners and obsolete heating plants.

We have 11 million homes heated by oil right now in America and a lot of those burners are pretty old. We need to develop new snap-in burners which require less maintenance. It can be fixed in central depots. [22] We can probably set up subsidiary companies, these are the things we are working on, looking at, to loan and finance developments which make burners available and tanks available on a loan basis to dealers.

Those are the general dimensions. There are many other areas that we need to get into.

As you know, we now have prototypes in the field of oil-fired air conditioners and that is going to be a very important market down the road.

Q How will the balance of the \$80 million be allocated?

A Well, the biggest amount that will be spent, we are hoping to counter the devastating results of the utility subsidy, that is the biggest part of that.

We envision it might work something like this, that a dealer right now who runs into a stone wall when he generally contacts builders in an area where the utilities are real active and that is in most of the areas, runs up against subsidies generally in the order of 15 cents a square foot to the builder.

We had hoped that NOFI, and it doesn't have to be a NOFI dealer, again our objective is to save the unit for oil because once it's gone to utility fuel, for all intents and purposes it's gone forever, you can't [23] recapture it the next day.

What we would envision would be to put our men in a position like this, he meets his neighbor and friend in the city and says, "Joe, you are building 25 homes, I belong to the same church or same lodge and our kids go to the same school, we belong to the same PTA and I would like to have you put oil heat in those homes."

And he says, "Well, I like you but I just really can't afford to do it because of the utility subsidies," and we would like to encourage this oil dealer to say "Yes, but something new has happened. NOFI's \$80 million program has made it possible for me to meet whatever utility subsidy you are getting and all I need is evidence, it could be an affidavit or detail which is sworn to so we can definitely equal the offer and NOFI will give me matching funds which will permit me to get in and compete."

That is what the bulk of the money is envisioned for and the other is the financing and loaning of money to handle these large capital requirements to get into and expand the central distribution system and total energy markets and these kind of things.

Q Have you had any experience which would lead you to believe that these promotional type expenditures would [24] be successful?

A Well, the Pacific Northwest region have actually had programs not quite like the one I am envisioning, but where they have actually furnished funds for their deal-

ers to counter utility subsidies and to bring the cost of oil-fired equipment in line with the cost of gas-fired equipment and it has been successful.

Q Do you think that air pollution legislation will have an effect on inter-fuel competition?

MR. EISEN: I would like to make an objection to that. I don't think the witness is qualified in any way as an expert in air pollution and I don't think your questions have so established him as being qualified by knowledge, experience, education or otherwise as being an expert on air pollution.

MR. KEMPF: I am not, of course, attempting to indicate that Mr. Peterson is an expert on air pollution. One, however, does not need to be an expert on air pollution to recognize that legislation in that field may have an effect on his business and I am asking him if it will and if so, to what extent.

Perhaps I better restate the question.

[25] BY MR. KEMPF:

Q Mr. Peterson, do you think that air pollution legislation will have an effect on inter-fuel competition?

MR. EISEN: Again, I have the same problem with that question and it is objectionable for all the reasons I heretofore stated and also calls for an opinion and conclusion of the witness. You can ask him what he knows, what he has experienced and so on but you can't ask him to speculate about a matter on which he obviously has no expertise.

MR. KEMPF: I think the record taken as a whole will demonstrate Mr. Peterson is eminently well qualified to answer this question and I ask him to do so at this time.

MR. EISEN: The question also is a very indefinite question and you refer to inter-fuel competition without delineating for what end uses the fuel is being used or consumed.

MR. KEMPF: To assist you, Mr. Eisen, let me state I am talking about all aspects of inter-fuel competition and the fuels which I am referring to are the same ones I have been referring to all morning, coal, gas, oil,

nuclear energy and I will [26] ask Mr. Peterson the question again.

Q Do you think air pollution legislation will have any effect on inter-fuel competition?

MR. EISEN: Same objection.

Q Answer the question, please.

A Yes, I do, very definitely.

I might say to you that NOFI actually is engaged in working with the government on air pollution and we have a contract, as a matter of fact, with them to run surveys on the air pollution problems on oils.

Of course, fuel oil has come under government pressure to reduce the sulphur content and this is a costly thing, but based on my reading and my understanding in talking with people within the industry, while it is costly, in fuel oil it is not as difficult to handle the sulphur problem as it is in coal.

MR. EISEN: I move to strike the volunteered comments of the witness as being an opinion which he does not have expertise. I think the answer that he has just given demonstrates that he knows something about the matter because he has discussed it with other persons, the same as lawyers learn about some of these matters when they work on cases, but this does not qualify him in my understanding [27] of qualifying an expert as an expert in the field. I am sure he has gained a lot of knowledge through reading as any layman might with regard to air pollution but he is not qualified as an expert to testify and give his opinion so as that evidence might be admissible in a case.

I think he can tell what he knows. He can give us facts, but his opinions are not admissible.

MR. KEMPFF: I readily understand the reasons which prompt you to register such an objection, counsel. I think it is not without noteworthiness to this case that the plaintiff in this case is at least convinced sufficiently of Mr. Peterson and his organization's expertise in this area to have entered into a contract with him dealing with this specific subject.

MR. EISEN: I don't think that that adds anything or changes the objection at all.

MR. KEMPF: Perhaps you don't but I am sure the judge will.

MR. EISEN: If you want to produce this contract, we can see what it calls for and what Mr. Peterson had to do, what his responsibilities are under the contract, what he had to do with negotiating [28] the contract, who he discussed it with in the government, what experts he talked it over with. You could go into those matters, those conversations, even though I think they are irrelevant, at least they will explore the area of his expertise.

You have not covered to lay a foundation for this man, Mr. Peterson's qualifications as an expert so as to give his opinion in response to the question as you propounded it.

MR. KEMPF: I think the record will demonstrate clearly that Mr. Peterson is eminently qualified to answer that question. If you have any doubts, I certainly urge you to pursue this line of inquiry you have suggested on your own cross examination.

BY MR. KEMPF:

Q Do you think that air pollution legislation will have any effect on coal's ability to compete either directly or indirectly in the form of electricity for the industrial, commercial and home heating markets?

MR. EISEN: This question is objectionable for all the reasons stated with regard to the prior question, plus the additional fact that there is no evidence whatsoever that Mr. Peterson is an expert on [29-38] coal and coal's relationship to the air pollution problem.

Unless he is so qualified, I am going to suggest we are encumbering the record with a lot of testimony which is highly objectionable, no probative value to the issues in this case.

Q Please answer the question.

A Would you please repeat the question?

(The question was read.)

MR. EISEN: I further suggest, counsel, you have asked three questions in one there and it can't be answered by a general comment.

Q Would you please continue with your answer to the question?

A I think that is so because first of all the government is taking a very strong stand on the sulphur content to the extent that in some situations where historical suppliers of fuel suddenly find they have no market, they can't even use it and comply with the government regulations and then if you find fuels with low enough sulphur content to satisfy the specifications and requirements, the costs are invariably higher and as the costs of the basic fuel gets higher, the cost of the electricity or finished products gets higher and reduces their ability [39] to compete.

Q Would the same also be true for coal used directly as a source of power for generating electricity?

A Yes.

MR. EISEN: The same what?

MR. KEMPF: The same comments that he just made in connection with the industrial, commercial and home heating markets.

A I would say so, yes.

MR. KEMPF: No further questions at this time.

EXAMINATION BY MR. SIMS:

Q You used the term energy market several times in your testimony on direct. As a supplier of fuel, can you treat the energy market as a whole or do you have to focus on its parts?

MR. KEMPF: I am not sure I understand the question.

Q Do you understand it?

A I think I understand. In order to get to the parts, I have to look at the interrelations now.

I am familiar with some work that has been done talking about it on the whole and it is necessary to get a common denominator and John Winger of Chase Manhattan [40] has probably done as good a job as I have seen where in order to get a common demoninator, spelled everything out in oil barrel equivalents and of course this had an influence. That I think is fine work and I am familiar with it, so you start looking at these

things and you try to convert things to barrel equivalents then you look at the interrelationship.

.

[48] Q From your knowledge does coal dominate as a fuel used by electric utilities in the Midwest?

A In the Midwest coal has probably over three-quarters of the business for utilities at the present time.

I think that needs qualification. That is at the present time, and yet we have seen in many areas where one time coal had practically all the energy and it has eroded down the road with the pollution thing, with nuclear energy. In fact, by 1980 we feel that coal will, even in that area and in the Midwest, will have a rapid erosion of its position to maybe 35 per cent, that is my best estimate.

Q And what is this based on, Mr. Peterson?

A This is based on studies, publications and conversations with economists in the business.

Q In your business or other businesses?

A In our business.

.

[50] A I would say it would certainly slow down this procedure and change the timetable of the present projections which are common in the industry. In effect, if we are successful, we will help coal out to that extent. We can change those curves.

Q You said, I think you mentioned in one of your answers previously that coal's market has eroded in certain established markets.

What particular market were you referring to when you made this statement?

A Well, the one I was talking to—well, the transportation market is practically gone. In fact, that is almost 100 per cent petroleum today.

In the home heat market, it has gone from, well, approximately half of the market in 30 years to 10 per cent.

In the industrial-commercial we have had erosion there. In other words, at one time it was the primary source

of energy everywhere and the only place that it has grown has been in the electric utility, in the utility market and it has grown there, but I think it is important—

.

[53] In other words, if all the conditions remained as they are right now in the universe of the market place, that might be true, but, let me remind you that right now we are almost certain that there have been fantastic crude oil finds on the North Slope and I have actual knowledge of plans to bring that into the Midwest and when that happens, we can see what happened when East Texas came in and crude oil was as low as ten cents a barrel at that time.

It is important to say, that if the status quo remains, what you asked I think was generally true, but the status quo doesn't generally stay status quo and I would hate to be tied to that.

Q Mr. Peterson, crude oil, the largest portion of it is sold to refiners, is that correct, in this country?

A Yes.

Q Crude oil is taken by a refining company and broken down into different distillates, residual fuels, isn't that correct?

A Yes.

.

[57] Q Will you answer the question?

A Your oil reserves are principally in the Texas-Louisiana area. There are reserves, of course, in California, in Wyoming areas, and, of course, Illinois and Michigan and, of course, they are diminishing in the Pennsylvania area, it is not a big factor there anymore.

Of course, the big thing which now appears to be on the horizon and people are backing this with a tremendous amount of money which is the North Slope which is expected to exceed in reserves, anything we have ever seen in this country.

Q This is in Alaska?

A Yes.

Q Mr. Peterson, didn't you tell us yesterday that you were a good friend of Hammond Chaffetz?

A I didn't talk to you yesterday but the day before yesterday. I said I would consider myself so. However, I did qualify that, I think, by telling you I think everybody in the industry knows Hammond and thinks well of him. Most everybody and certainly anybody that had a connection with Standard of Indiana or American Oil Company recognizes the man's capabilities. Of course I have literally hundreds of good friends, you know, but [58] I don't dislike him, if that is what you mean. In fact, I do like him.

. . . .

APPENDIX
Volume II—Pages 465-1016

FILED

SEP 26 1973

MICHAEL ROBAL, JR., CLERK

Supreme Court of the United States

OCTOBER TERM, 1973

No. 72-402

UNITED STATES OF AMERICA

Appellant

v.

**GENERAL DYNAMICS CORPORATION, THE UNITED
ELECTRIC COAL COMPANIES, AND FREEMAN
COAL MINING CORPORATION**

**ON APPEAL FROM THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS**

**JURISDICTIONAL STATEMENT FILED SEPTEMBER 8, 1973
PROBABLE JURISDICTION NOTED DECEMBER 11, 1972**

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* Not reprinted in Joint Appendix. Citation is to appendix of Jurisdictional Statement.

3

[2]

EXCERPTS FROM DEPOSITION OF
HAROLD S. WALKER, TAKEN APRIL 18, 1969

.

HAROLD S. WALKER, JR., called as a witness by the defendants, being first duly sworn by the Notary Public (Richard Kaufman), and stating his address as 123 Cherry Street, Katonah, N. Y. 10538, testified as follows:

EXAMINATION BY MR. KEMPF:

Q Will you state your name?

A Harold S. Walker, Jr.

Q What is your home address?

A 123 Cherry Street, Katonah, New York 10536.

Q Mr. Walker, are you appearing for your deposition [3] this afternoon pursuant to a subpoena?

A Yes, I am.

Q By whom are you employed, Mr. Walker?

A The American Gas Association, Inc.

Q What is your business address?

A 605 Third Avenue, New York, N. Y. 10016.

Q Mr. Walker, what is your present position with the American Gas Association?

A I am director of public affairs.

Q Will you briefly describe for us your background in the gas industry in general and with the American Gas Association in particular?

A I have been serving in the national association of the gas industry, this American Gas Association, since May of 1954.

I came to the Gas Association in the position of secretary of the general management section, which means that I was serving committees that were engaged in a number of staff type activities in member companies, such as insurance claims, rates, economics, finance, accident prevention and what you might describe as middle management, the managing committee of the section

was a kind of junior board of directors composed of middle management personnel in the gas industry.

[4] I then became secretary of the Association, corporate secretary, where I was in charge of the administrative activities of the Association and had the usual duties implied by the title Corporate Secretary.

After that I became assistant to the managing director, his personal assistant from a policy point of view and a speech-making point of view and so forth, but I had operating responsibility for all of the sections of the Association, the Association being organized on lines analogous to a member company.

I had charge of the operating section, the accounting section, the general management section which I used to be secretary of, the industrial-commercial sales section and the residential section.

I had a collateral responsibility of a committee on regulatory affairs.

After that I became assistant managing director and was placed in charge of public relations, government relations and administrative services of the Association, such as, utilization, engineering, statistics, economics, business research and publications.

Pursuant to a reorganization in March of 1968, I became director of public affairs, the title of assistant managing director having been abolished and became [5] responsible for government relations and public relations.

During these 14 years at the Association, I have been deeply involved in studies of fuels and energy competition, fuels and energy policy. I wrote the Association's statement of position in the fuels and energy study that was made by a staff group for the Senate Interior Committee, and I believe it was 1960, that is the green booklet that you gentlemen have been referring to.

I participated in and was largely responsible, from a staff point of view, for the formation of the potential gas and future requirements studies committees which are two committees which are supported by all three segments of the industry, the producers, the pipeline companies and the distributors and their job is to make

estimates out to the year 1990 of the amount of gas likely to be found and the amount of gas likely to be needed by that year.

Q When was the American Gas Association founded, Mr. Walker?

A In 19—well, the American Gas Association was founded in 1927, having combined two associations, one a professional society and the other a trade association and their roots go back to 1918 when the American Gas [6] Association as a membership society was first organized and before that it was called the American Gaslight Society and it goes back into the 19th century, but essentially, the American Gas Association as we know it today stems from 1927 in this across-the-board sense of being both, if you will, an engineering society with individual members and a trade association with company members.

Q Approximately how many members are there in the American Gas Association at the present time?

A Including all classifications of membership and throwing in 600 manufacturers subscribers who were not, strictly speaking, members, somewhere between 8000 and 9000.

Q How big a staff does the American Gas Association have?

A Our staff is, in the first place, distributed between New York, Washington, Cleveland and Los Angeles. The total number of staff is, it hovers around 400.

Q What function does the American Gas Association serve?

A It serves to advance the interests of the gas industry by helping our member companies perform outstanding service to the consumer, increase its share of the energy market, provide for the public health, welfare [7] and safety through safe practices and procedures, to improve the professional competence of the individual members of the Association, to exchange information among the member companies of the Association and to perform all of the functions which the general larger trade association performs in the traditional sense.

Q Do members of the American Gas Association serve the States of Illinois, Indiana, Kentucky, Tennessee, Missouri, Iowa and Minnesota?

A Yes.

Q Does gas compete with coal and other fuels for the business of the home heating customers in these Mid-western states?

A They sure do. We compete vigorously for the home heating market with everybody who comes along and at the present time, something like 50 per cent of the market is gas and about 30 per cent of the market is oil, 10 per cent coal and I have a hard time thinking it is still that high, but that is what the various surveys show, and coming along is electricity with about 2 per cent of the home heating market in that area.

Q Do the gas companies attempt to convert those customers presently using coal for home heating purposes to gas?

[8] **MR. FUTTERMAN:** I object to that question as leading.

Q You may answer. Do you want me to restate the question?

A Yes, restate the question.

Q Do the gas companies attempt to convert those customers presently using coal for home heating purposes to gas?

MR. FUTTERMAN: Same objection.

A I can answer it though?

Q Yes.

A Yes, we compete for the home heating market and we, of course, compete against coal. We are trying to get as great a share of the market as we can and coal is a fairly easy market, coal heating is a fairly easy market to get because of the problems that people have who burn coal, having to take the ashes out every week, so forth and so on.

It is tough to get the load away from oil.

Q Does the American Gas Association expect competition between coal and gas to continue in the home heating market in the years ahead?

MR. FUTTERMAN: Just a minute. I would like to move to strike Mr. Walker's last answer on [9] the ground it was suggested by your question.

I would ask the reporter to repeat the question that Mr. Kempf just asked.

(The question was read.)

Q You may answer.

A Yes.

Q What do those in the gas industry anticipate that the competition for the home heating market between gas and coal will look like, say, ten years from now?

MR. FUTTERMAN: Objection to that question on the ground it calls for a hearsay answer.

Q You may answer.

A Ten years—what market?

Q The home heating market and what I am specifically asking for are your views as someone who has been in the industry and had the experience which you enumerated earlier.

MR. FUTTERMAN: Are you qualifying Mr. Walker as an expert?

MR. KEMPF: I just indicated on the record the exact basis upon which I am asking him this question.

MR. FUTTERMAN: Do you withdraw your prior question and are you now asking for Mr. Walker's [10] opinion in regard to the question you just asked?

MR. KEMPF: To make it perfectly clear, I will restate the question.

THE WITNESS: Why don't you restate the question?

BY MR. KEMPF:

Q What do you anticipate that the competitive picture vis-a-vis coal and gas for the home heating market will look like in the next five to ten years?

A Between coal and gas for the home heating market in the next five to ten years, I expect that coal will completely disappear from the home heating market in the next five to ten years.

Q What about oil and electricity, vis-a-vis gas?

A In the next five to ten years—in home heating?

Q Yes.

A I think there is going to be a tremendous battle between gas and oil for a share of the market in the next five to ten years and I think this will become increasingly complex by the inroads made by electric heating into both oil and gas home heating markets. In some areas of the country, electric heating is making considerable inroads. Of course, gas continues to make considerable inroads against oil. We passed the oil [11] industry in total number of heated homes a long time ago.

Q How do you account for the growth of electricity that you have discussed?

A No moving parts, quietness, even heat, convenience and flexibility in the sense that you can have your various rooms of the house at different temperatures and safety is another consideration, but something that is sort of hard to quantify called modernity.

Electric seems to be sexier than gas or oil and people go for it because it is the mod thing to do. It is where it is at and, probably the most important thing of all is, an economic and sociological fact that if what one buys will fit one's budget, one will buy it on what he conceives to be its merits rather than on its costs.

If you can stand the outrageous electric bills and you are convinced about this modernity thing, you will buy electric heating.

Now, I might say parenthetically that this isn't true of industrial and commercial customers. They will buy strictly on economics and the consumer is almost, the householder is almost entirely at the other end of the spectrum.

Q Does gas compete with coal and other fuels for the commercial and industrial business in the Midwest? [12] A Yes, very definitely. I think gas has about 45 per cent of the industrial and commercial market and coal has about 35 per cent and oil has about 20 per cent of that market. I don't know the figures for electricity.

There are considerable uses, industrial uses for electricity. A lot of heat processing is done by electricity, especially where you have to have specially prepared atmospheres that won't permit you to have flue products going around in what you are melting and you have to use electricity for industrial heat.

Q Do you expect this competition to continue in the future?

MR. FUTTERMAN: Objection. The question suggests an answer and it is a speculative answer that is called for.

A I think the competition will intensify every time the competition comes up with some process, industrial or commercial process that gets a temporary advantage on another form of fuel, and I can speak rather feelingly of the gas industry, we make every effort through crash research programs when we are not smart enough to have something that can already be accelerated, to catch up.

We are doing work like this in the area of brass [13] melting, because other forms of fuel, specifically electricity in this case did a better job of preserving the charge. Using gas for that particular brass melting process, there would be a lot of oxidation of the brass and that would have to be lost or thrown away. We developed a process whereby we cover the metal with glass, molten glass and that keeps it from happening.

In the commercial field when the electric people came out with countertop fast-food equipment, specifically countertop friers for French fried potatoes and donuts and so forth, we didn't have any countertop equipment so we had to create it and it was a very difficult problem because with electricity, you just have to wrap coils around your pots, so to speak, you just can't wrap gas flames around a pot because you have to find a way of getting rid of the flue products and in order to do that, you have to have an extremely carefully engineered product in order to get the flue products out fast enough in order to be safe, of course, so we had a great deal of difficulty in this, but nevertheless we went ahead and did it and research in that area continues and

we are developing smaller and smaller burners so that we are now capable, in the home heating market, for example, of heating the house with a furnace that is only one-half [14] the size of a standard furnace.

There we have an advantage over oil. They haven't apparently tried miniaturizing oil burners yet but they will.

Electric competition forces us in that area. An electrically heated home doesn't have a furnace and they make claim of having more space available in your basement and you don't have to run into the furnace when you are chasing the ping pong ball and so forth.

The smaller we can get our furnaces, the closer we can come to offering the same advantage that the electric heating people can.

Q Do the gas companies compete for the business of the electric utilities in the Midwest?

A Well, they must be competing for it because they are using, in the Midwest, in two blocks of Midwestern states, an excess of 400 billion cubic feet of gas per year.

That is not the kind of load that the gas industry can dismiss lightly.

By the same token, it is true that gas companies would prefer to shift that load over to more profitable uses but it can't be done overnight. It depends on the competitive situation. Gas has to [15] compete with other forms of fuel in order to make that transfer and more importantly, gas has to develop summer-time loads, because that is where most of this gas is used. That is the time when most of this gas is used, in the summertime, because there is no heating in the summertime and the company either has to pay a higher rate for taking less gas from the pipeline company or put it in storage formations in the ground and hold it until next winter and if it does not have those alternatives available, it will sell that gas on an interruptible basis to power plants or anybody else that will take it on an interruptible basis and they will make money on it, as long as they get more than they paid for it and nobody is giving gas away on an interruptible basis. It is a profitable load, although the profit margin is not like the industrial or commercial

or residential—I mean the firm industrial, commercial or residential load.

Q Does the amount of gas burned by individual utilities vary from area to area within the Midwest?

MR. FUTTERMAN: I object to that question on the ground it suggests an answer.

A Yes, it does. Some states such as Kansas generate almost all of their electricity from gas. Other states generate almost all their energy from coal, electric [16] energy from coal.

Nationwide, and this is the area I know best, of course, nationwide, 25 per cent of the electric energy is generated by gas.

Q What would the figure be for the State of Iowa, would you have any feel for that?

A It is about 50/50 in Iowa.

Q What about Missouri, Minnesota?

A I don't recall the percentages, but they are pretty high in gas usage in those areas but I don't have a feel for the actual percentages as between gas and coal or oil either for that matter. Of course, oil isn't easy to get to the Midwest. It is at the end of long transportation lines.

Q Does the gas industry consider those utilities which you have indicated consume a smaller percentage of their overall fuel requirements from the gas industry as important markets?

MR. FUTTERMAN: Would you repeat the question?

(The question was read.)

MR. FUTTERMAN: Counsel, I don't think you correctly characterized or repeated Mr. Walker's testimony. He didn't refer to a specific utility [17] and I don't understand the question. If you could rephrase it, I wish you would.

Q Does the witness understand the question?

A Let me state the question, the question I am about to answer and that will tell you whether I understand it.

Do I think that even though a utility, electric utility uses a small amount of gas, does the gas company that is selling that electric utility consider that small amount

of gas an important market, an important sale or important load, is that the thrust of your question?

Q Yes, it is.

MR. FUTTERMAN: Then I will object to that question as calling—the answer is suggested by the question and it is hearsay.

Q Please answer the question.

A Yes, it is an important market because it is sold on an interruptible basis because otherwise the company wouldn't be able to make anything from the gas and would have to pay a higher rate for the gas that it is taking.

Pipeline companies have their rates set in such a way that if you are taking, you have a contract with the pipeline company and if you are taking 100 per cent [18] of your contract quantity day in and day out, 365 days a year, you got your lowest rate that way.

Along comes the summer and you have to cut back, say, to 70 per cent of your contract quantity, then you pay a higher rate for your gas, and this could screw up your whole economic situation.

So, if you possibly can, you continue during the summertime to take 100 per cent of your gas and either pump it into the ground or sell it for industrial interruptible uses because you could at least make as small an amount of money even as low as .025 cents but that is better than paying a penalty taking 70 per cent.

Sometimes the economics work out if you forego that load, it is costing you more money to take 70 per cent of the gas than take 100 per cent of the gas even though you are making .025 cents on it and .025 cents is merely a number to show what a tiny split point is necessary to cause a decision to use one form of energy over another, because on the other side of the fence, when the electric company which is buying this gas for X price, if that gas changes in price or if coal—gas can't change in price, they are serving it under a rate, but if coal gets down below that rate by only .025 cents, the electric company will turn on the coal.

[19] Q Does the gas industry expect competition for the business of electric utilities in the Midwest to continue in the future?

MR. FUTTERMAN: Same objection as before. You are suggesting the answers to the witness by your question.

MR. KEMPF: None of the questions I have asked in my opinion suggest any answers to the witness, but, of course, the judge will rule on that.

Q Please answer the question, Mr. Walker.

A Yes, I expect competition for the business of the electric utilities to continue in the future, but I have to qualify that in the light of earlier answers I have given and to put this thing into perspective.

As I have said before, gas companies prefer to move their sales over into areas where they can make more money and they will do that in a number of ways.

They are doing it right along by the creation of more and more underground storage pools. They are doing it more and more in the promotion, development, research, development and sale of air conditioning equipment, so that we are moving, trying to move toward the ideal situation in the future where we have the same [20] load in the summertime as we have in the wintertime and that load is the optimum mix of rates to optimize the profitability situation, and I might also say to optimize benefits to the consumer.

Q Does the gas industry have under way any projects or programs which could lead to greater inter-fuel competition, other than the ones you have discussed in connection with prior questions?

A Yes.

One way we can—well, broadly speaking we can intensify, or at least continue inter-fuel competition by not running out of gas, by continuing to be in business, to the extent that we can see ourselves in the 21st century still promoting rather than rationing our product.

Now, within that parameter, we have a number of projects on the way. One project is gasification of coal. We are building, pretty soon, a million cubic foot a day gas plant in Chicago which will be an experimental large size pilot plant which we expect will lengthen out our reserves of gas.

We are already engaged in importing liquified natural gas into this country for the purpose of providing peak shaving service. Peak shaving means supplying gas in the wintertime when it is very cold and you can't [21] get enough gas from the pipeline company.

This is a way too, of storing natural gas in liquid form for those companies that are not fortunate enough to have underground storage pools, but this, of course, is a peak shaving business and so far much of it is being done by gasifying, by liquifying gas in the summertime and putting it in tanks in the summertime, gas from the pipeline, domestic gas from the pipeline, rather than pumping it into the ground because there isn't any underground storage capacity available.

Just a couple of weeks ago, gas from Algeria, liquid gas from Algeria was delivered in Boston. The Philadelphia gas people are negotiating with Venezuela for quantities of liquified gas and the field is very alive today.

In another way we intend to stay in competition is by freeing up tight formations in areas out in the West. You probably all heard of Project Gas Buggy, where an atomic explosion was set off underground in a tight gas formation and greatly increased the flow of gas from that formation.

In the standard or average gas formation you can get up to 80 per cent of the gas that is in there out. Practically the only gas that is left there by the [22] time it is exhausted is gas that is in there because it is under atmospheric pressure and you can't pump it out.

In this tight formation in the Picture Cliffs area in New Mexico, the recovery from that field was only 30 per cent and it is too early to tell what percentage it has been increased to but the gas flow has increased immeasurably in a few months of testing out there. They have already produced twice as much or something like that of gas as they produced in a well right next door produced in nine years.

This will add to our reserves.

This means that we are going to have plenty of gas in the future and we are going to sell it in the future.

Q Are you familiar with the new discoveries of petroleum and natural gas in Alaska and in Canada?

A Yes, generally speaking. Those reserves will help us stay in business in the future.

The last time I counted it, and this was quite some time ago, but it can only be larger since, we had under contract with Canada, 6 trillion cubic feet of gas. In effect, that added 6 trillion cubic feet to our own domestic recoverable reserves, assuming a long-term [23] contract will be honored.

Large quantities of gas have already been discovered in Alaska in the Cook Inlet area and now gas and oil both are being found on the North Slope in Alaska.

When that gas finds an outlet, it will contribute to the competitive situation and displace coal and oil.

Q Are you familiar with the development of geothermal power generation on the West Coast?

A Yes. Pacific Gas & Electric Company which is engaged in that development is a member of this Association. They are quite enthusiastic about the project and to the extent that they can develop large amounts of geothermal energy, they will make contributions to air pollution control and displace competing forms of energy to other parts of the country.

Q Do you expect air pollution to have any effect on inter-fuel competition in the years ahead?

MR. FUTTERMAN: Objection. You are suggesting an answer to the witness again.

A Well, I can answer that question both as to what is happening now as well as to what I can see will happen in the future.

Air pollution control in the City of New York has already led to substantial alterations in the [24] competitive situation in the market. So much so that both Con Edison and Brooklyn Union have invented temperature controlled rates.

These rates operate in this way: A building owner, a large user of energy for heating may have had either

coal or bunker 'C oil which has a high sulphur content and the city regulations call for a reduction of that sulphur content to 1 per cent by 1971.

Things are moving faster than that, however, and one of the reasons they are moving faster is because of those temperature controlled rates.

You go to the building owner and you say you put in a standby tank for No. 2 oil. This is ordinary home heating oil which has no appreciable sulphur content and is a fairly clean burning fuel, and we will supply you with gas all year round for your heating until the temperature gets to be 20 degrees or less.

When it changes to 20 degrees, then you agree to turn on your oil burner and turn the gas back on again when the temperature gets above 20 degrees.

There is only one reason that that rate was invented and that was to make a contribution to air pollution control in the City of New York.

It isn't the only place where this is going on. [25] It is going on in Philadelphia. All you have to do is look at some of the ads that the Philadelphia Gas Works put in the paper showing a smoggy city to know that they are competing like hell to get heating business away from coal and oil.

MR. KEMPF: I have no further questions at this time.

MR. FUTTERMAN: Can we take a short recess?

(Short recess taken.)

EXAMINATION BY MR. FUTTERMAN:

Q Mr. Walker, isn't it a fact that in 1966, coal contributed approximately 93 per cent of the BTUs generated by steam electric utilities in Illinois?

A I seem to recall some such a figure.

Q Isn't it also a fact that in 1966 coal contributed approximately 96 per cent of the BTUs generated by steam electric utilities in Indiana?

A I am not as familiar with the Indiana figure but I would concede that.

Q Isn't it a fact that in 1966 coal contributed approximately 100 per cent of the BTUs generated by steam electric utilities in Wisconsin?

A Yes. There are some areas in Wisconsin, however, [26] where a lot of gas is used and I was talking about portions of some of these states.

* * *

[35] Q Is it your opinion that gas companies experience minimum demand during the summer months?

MR. KEMPF: I am not sure I understand the question. I have no objection to the witness answering it if he does. If he does not, however, I would certainly ask that counsel clarify it.

Q Do you understand the question?

A Yes, in the sense that the gas companies sell less gas in the summertime than they do any other part of the year.

Q Is it your opinion that gas companies must keep the gas coming through the pipelines during the summer months despite the lesser demand during the summer months?

A Yes.

MR. KEMP: I will object to this line of inquiry again. Mr. Walker detailed his position with regard to this matter quite clearly, at quite a length during the course of my direct examination.

I see no purpose being served by having him go through the same course of inquiry a second time.

MR. FUTTERMAN: I object to your interruption to my cross examination, counsel. I am [36] trying to amplify what Mr. Walker testified to on direct examination as is my right on cross examination.

MR. KEMPF: And I would wish to indicate to the record I am, of course, not interrupting your cross examination, but merely exercising my right to object to those portions of your cross examination which are in my judgment objectionable.

A Yes.

Q Mr. Walker, didn't interruptible rates result because the gas company had to sell this gas it was taking

during the summer even though its prime markets weren't taking that gas?

A Even though? Because its prime markets weren't taking the gas.

Q Mr. Walker, isn't it a fact that the interruptible rates are set just below the prevailing coal price for equivalent BTUs even though the price may yield only a minimum return on investment to the gas company?

MR. KEMPF: I will ask that question be read again. There are several qualifying statements within it.

(The question was read.)

MR. KEMPF: I will object to this question [37] on the basis that once again it was covered in detail during the course of my direct examination.

Q Would you answer the question?

A Yes. Generally speaking, the prices are arrived at by either one of two processes.

In those states where it is only possible for the company to serve gas under specified tariffs, the company has to seek a tariff which is just under the competition.

In some states, it is possible for a company to contract for industrial loads like that directly with a supplier in which case he can set his price just under. I am trying to make that clear, make it clear that companies are not at quite the liberty that your question would indicate. They don't just set prices. Their prices are regulated with some exceptions.

Now, even though there is a very small return, in order to put that question into perspective, certainly the return is small, but the return is not an insignificant return.

I don't have figures for an individual gas company, but I do know the total interruptible sales, and it is in that book too.

* * *

[39] Q Electric utilities need a guaranteed source of
[40] energy all year around, do they not?

A Yes.

Q Interruptible gas does not provide a continuous source of energy, is that correct?

MR. KEMPF: By definition.

A By definition.

MR. CUSACK: The Government objects to the statement of Mr. Kempf which was just made by Mr. Kempf as being highly improper.

MR. KEMPF: What I was indicating on the record was that Mr. Futterman's question answers itself. If something is interruptible, it is interruptible.

MR. CUSACK: Your statement, sir, was out of order.

MR. KEMPF: The Court, of course, will rule on that.

BY MR. FUTTERMAN:

Q Mr. Walker, isn't it true that gas companies are declining the amount of interruptible gas sales as a result of the result of the development of underground gas storage caverns?

A To some extent, yes, in areas where underground gas storage is feasible.

[41] Q Isn't it also true, sir, that companies which do not have underground gas storage caverns rely on other gas companies which do have underground storage caverns to store gas for them?

A To some extent where the economics will permit it.

Q Do People's Gas and Northern Illinois Gas have underground gas storage caverns?

A Yes, they do.

Q Those two companies are located in the State of Illinois, are they?

A Yes, they are.

Q Isn't it true that the purpose for storing gas in underground storage caverns is to permit the gas company to fulfill its obligation to the pipeline company by continuing to take gas during the summer and at the same time, permit the gas company to store that gas for sale during the winter when they can achieve or obtain greater revenues for the gas?

MR. KEMPF: That is a complicated question. I ask for my benefit the reporter please read it.

(The question was read.)

A This is what happens when it makes economic [42] sense to do so.

I would say for the record that these really aren't caverns, they are underground porous formations, there isn't any hole down there, or cavity down there.

The gas company can only store gas for as long a period of time as it is economically feasible to do. As any shopkeeper knows, he loses money the longer he keeps stuff on the shelf.

It is necessary to look at the whole economics of the underground storage situation in order to determine whether you can in fact hold all of that gas you are pumping underground for use next winter or whether you must supply some of that gas, not put it underground, supply some of that gas for interruptible use.

Q Mr. Walker, are gas companies without underground storage facilities liquifying gas or buying liquified gas in the summer for sale in the winter?

A Is that a question?

Q Yes.

A I must have missed the first part.

(The question was read.)

A Are they liquifying it or buying it for sale in the winter?

Q Buying liquified gas.

[43] A They are doing this, but here is how it works.

You don't buy liquified natural gas from Venezuela in April that you are going to use next January.

If you have a liquification plant where you are making liquid natural gas during the year, this is a rather expensive proposition, so typically, you start when the heating season ends, May or so, you start liquifying your gas at that time and you keep liquifying that gas up through maybe even September or October, for that matter and by that time your small capacity equipment has filled the tank and then if you get a real cold series of days, that tank may empty itself out in five days in the wintertime and that is a very expensive proposition, although it is not as expensive as buying penalty gas

they call it from the pipeline company and, of course, it is not as expensive as not being able to get any gas.

Q Is the gas liquified as it comes out of the pipeline?

A Yes, through a liquification plant, but it has very small capacity so it takes a long time to fill the tank.

It is not the kind of plant that is in Algeria, which has the job of liquifying large amounts of gas quickly and therefore it is a tremendous installation.

* * * *

[47] Q Would it be fair to state that the gas companies in Illinois would prefer not to sell gas to the electric utilities if that gas could be sold in the home heating market?

A I would say the answer to that had to be broader than the question. They would prefer to sell their gas for uses where they can make more money on it than they could make on it for interruptible uses.

This means that they would prefer to sell it for firm industrial use.

The home heating market is, of course, our base load market, but it only has a 50 per cent load factor and the very fact we are so successful in selling all that gas in the wintertime, gives us problems in the summertime because we have to maintain the capacity of the design of the system and we have to keep paying for that system over a long amortization period of time because the gas industry is a capital intensive industry.

We have to continue to pay for those facilities, whether there is a cubic foot of gas moving through the line or not and, therefore, in the summertime, we have to keep selling it in order to make a contribution toward the amortization of that investment.

You don't make any contribution whatsoever [48] toward your amortization of investment when you are not selling gas and, I might say, the electric industry is in the same shape at different times of the year. That is why they are selling electric heating. To try to use their facilities in the wintertime.

Q I will ask you a question now that is a hypothetical.

I want you to assume that gas can be sold to electric utilities at a price lower than coal and I want you to further assume that the electric utility would then be able to reduce its rates to its consumers in the home heating market.

My question to you based on those two assumptions is, would that not make electricity more competitive with gas and enable electricity to be a stronger competitor for the home heating market?

MR. KEMPF: Could I have that question reread?

(The question was read.)

A If there was a wide disparity in the—if gas were able to undercut coal by a wide margin, and I have no idea how wide the margin has to be, this would be true.

However, it is a competitive practice to undercut [49] the competition by only so much as is necessary to do so.

* * *

[52] Q Would you explain that, please?

A The money that producers acquire as a result of [53] the depletion allowance is available for exploration for further quantities of gas, to the extent that the depletion allowance is reduced, less money for exploration will be available and the gas reserves will decline and gas will become scarcer and there will be upward pressures on gas prices and eventually curtailments of gas service starting off at the interruptible end of the spectrum.

Q Have the policies of the Federal Power Commission had an adverse effect on the coal industry, I mean on the gas industry?

A Yes. We don't feel that the Federal Power Commission in its development of area pricing has arrived at methods and procedures setting the prices of gas in the field that are sufficiently precise for the Commission to be able to confidently say that a certain price set will in fact induce the producers to search for the further quantities of gas.

We think that the prices set are on the low side and we see a demonstration of that in the fact, in the fact that I have already mentioned, the 40 per cent decline

in well drilling and the first time decline in available reserves.

. . . .

[57] BY MR. KEMPF:

Q Does the witness recall the question?

A I think I need the question repeated.

(The question was read.)

A Yes.

Q During the course of your cross examination by Mr. Futterman, you indicated concern over certain policies by the Federal Power Commission.

My question to you is this: Is the American Gas Association devoting energy and resources to efforts aimed at changing those policies?

A We are engaged in an effort to work with government toward the development of wise public policy, to the extent that we feel that certain public policies are erroneous or inhibitory, we work not merely to change them, but to improve them.

Q Thank you.

Mr. Walker, do all distributors of products and services hope to sell their products or services for more money rather than for less money?

Do you understand the question?

A Yes, I understand the question. Yes, all distributors of products and services would like to receive more rather than less for their products and [58] services.

. . . .

[3]

EXCERPTS FROM DEPOSITION OF
WILLIAM J. STANLEY, TAKEN APRIL 24, 1969

* * * *

(The witness was thereupon duly sworn.)

WILLIAM J. STANLEY,

called as a witness by the defendants herein, having been by me, the said Claude W. Youker, Jr., as Notary Public aforesaid first duly sworn, was examined upon oral interrogatories and he did thereupon depose and testify as follows:

DIRECT EXAMINATION

BY MR. HAUBOLD:

Q Sir, would you state your name and the present position you hold.

A My name is William J. Stanley. I am Director of Air Pollution Control for the City of Chicago.

Q Mr. Stanley, could you describe very briefly your prior professional experience?

A My educational background is fundamentally engineering and business administration.

I have worked with the Worthington Corporation, the University of Illinois and the Chicago International Trade Fair.

[4] Q Where did you take your engineering training, Mr. Stanley?

A The University of Illinois. I have a Bachelor's degree. I also have a Master's degree in business administration at De Paul.

Q In what field of engineering did you receive your degree?

A Mechanical; mechanical engineering.

Q Can you describe briefly, Mr. Stanley, what your responsibilities are as Director of the Department of Air Pollution Control for the City of Chicago?

A The major responsibility, of course, is to enforce the ordinance, and the duties of the Director are clearly outlined in that ordinance, if you want to go over them.

Q As Director of the Department of Air Pollution Control, have you participated, or did you participate in the formulation of the standards and limitations contained in the June 19, 1968, amendments to the ordinance?

A Yes. We provided the technical information that was required by the Committee on Health concerning the feasibility and the effects of this [5] ordinance.

Q Can you describe generally the types of problems that the standards and limitations were aimed at correcting?

A The amendments to our ordinance were aimed at several areas.

No. 1 were the particular limitations on fuel burning and other industrial processes.

Secondly were the sulfur limitations on fuels being used in Chicago.

Thirdly was the practice of garbage burning in coal-fired units and some operational changes.

Q Specifically, what are the restrictions concerning sulfur limitations in fuels contained in the ordinance?

MR. SIMS: I think the ordinance itself would be the best source for this.

BY THE WITNESS:

A Yes. It is in the ordinance. 2.5 the first year, 2 one year from then, and a limit of 1.5 per cent thereafter, something to that effect. It is in the ordinance.

[6] BY MR. HAUBOLD:

Q When you spell out per cent, are you referring to per cent content sulfur by weight?

A By weight. Per cent sulfur content by weight. That is expressed in the ordinance.

Q Why were the restrictions on sulfur expressed in per cent content of fuels?

A Well, for two reasons: No. 1, to limit the fuel coming into the Chicago area; and No. 2, it is a most

expedient engineering way of calculating how much goes out the stack.

Q Did your department consider an alternative of emission standards as opposed to fuel content standards?

A In our ordinance we have both. We have emission standards and fuel content standards, so you really have to look at the ordinances as a total. You cannot take it in pieces as such.

You have to look at it as a total, because we have emission standards on certain things, we have fuel limitations and opacity and nuisance. We have, really, four parts to our ordinance.

Q Specifically with regard to the restrictions on sulfur content, did you study the feasibility [7] of providing an emission standard rather than a fuel content standard?

A Yes. The problem there was that there was really not a technology that one could use to meet a particular emission standard, so therefore, in the particulate area where we have the technology, we have it expressed as an emission standard.

In the area where we do not have a technology, we have it expressed as a fuel limitation.

Q Such as in the sulfur content?

A The sulfur content, that is correct.

Q Are you presently aware of any economically feasible process by which sulfur can be removed from fuels?

MR. SIMS: Sulfur in what form, counsel?

MR. HAUBOLD: I am glad you clarified that. Let me rephrase the question.

BY MR. HAUBOLD:

Q Do you presently have any knowledge of an economically feasible way by which non-pyritic sulfur can be removed from coal?

A So far as I know and so far as the indications are, there is no large scale methodology [8] available for removing sulfur in the pyritic or the free state from the fuel before it is being burned.

Q Mr. Stanley, did your department undertake any studies to determine the availability of low-sulfur coal for consumers in Chicago?

A We did.

Q Can you describe generally that study and how it was undertaken?

A We did a direct mail study to several distributor groups and also direct producers in the midwest area that normally supply the Chicago market, and the indication was that in the small and intermediate size markets, that is, for the smaller, non-utility market, there was an abundance of low-sulfur coal available.

The utility market represents—or the supply to the utilities represents an entirely different marketing channel, and that this would require special consideration.

Q Mr. Stanley, by "low-sulfur coal", are you referring to coal which meets the Chicago standards?

A That is correct.

[9] Q Mr. Stanley, do you have—

A You could add to that that we were not looking at just sulfur. We were looking at the total energy picture, coal, oil and gas.

Before we passed an ordinance, we made a study to find out that if we did pass the ordinance, was there an energy availability in the normal marketing channels to meet the situation that we are proposing by law, and we found that there was an adequate supply of coal, low-sulfur coal, an adequate supply of gas, and an adequate supply of low-sulfur oil, so we were not talking about coal, oil or gas, we were talking about the total energy picture when we did this study.

Q Mr. Stanley, in your opinion, what is the likely effect of the sulfur content restrictions on utility coal consumption in Chicago?

A The utilities have, over the past several years, been going to larger power plants, remotely away from the city.

Therefore, the use of coal in the smaller power plants as they remain in the city has been going down. That is, the use of coal in existing power plants has been going down, and [10] it has been substituted by gas or oil, in Chicago as well as in other areas, and the construction of new power plants has been either mine

mouth installations or nuclear energy, and this has been the trend in Chicago, and the ordinance, we were advised by the Commonwealth Edison Company, would only accelerate this process, but this was in the plans.

The complete proposal made by Commonwealth Edison on the displacement of energy sources for Chicago in the utility area is in the report that I gave you from Commonwealth Edison, which was presented to the Appeal Board.

Q Mr. Stanley, from your studies do you have an estimate as to what percentage of sulfur dioxide emissions within the city of Chicago currently stems from electric utility production?

A Our best estimate, from the figures we got from Commonwealth Edison, indicate that about 60 per cent or 65 per cent, depending on the time of the year, of the sulfur emissions on the ground, leaving the ground in the Chicago area, was from the burning of high-sulfur coal in utility power plants.

Q Mr. Stanley, can you describe generally [11] the facilities your department has for the detection of pollution sources within the city?

A We have three ways to handle it. No. 1, we have the telemetered air monitoring network, which indicates the condition of the atmosphere.

We measure wind speed, wind direction, sulfur dioxide, particulate matter and CO, carbon monoxide, at various stations in the city.

We also do a qualitative and quantitative emission inventory on the large industrial users of fuel and other processes, fuel burning and other processes.

We also have twenty cars on the street that respond to violations as they occur.

Q Can you describe typically what would happen if a private citizen would phone in a complaint that a source of pollution had been detected in his area? What mechanism would you set in motion under these conditions?

A We respond to citizen complaints with the automobile first. We send out an automobile to investigate it.

If he finds in fact that there is a violation taking

place, we will begin with a \$10 summons [12] or a \$10 ticket.

From there, if it appears to be an equipment defect or a process that requires control, we route it through our Engineering Services Division, where it is put on a continuous surveillance basis, and the equipment is evaluated individually.

I ought to say, too, that every single new plant, every single building that goes through the Building Department is reviewed. We station a man down there and we review every single new construction with respect to air pollution in not only fuel burning but incineration and all the industrial processes.

Q Does your department undertake inspections at given intervals to determine whether specific combustion equipment is operating properly and not producing pollution?

A We annually inspect 40,000 fuel and refuse-burning installations in the city, with respect to which we issue a permit to operate for an additional year.

We also annually inspect about 5,000 industrial installations having various processes, fuel-burning and other chemical or industrial [13] processes.

Q What kinds of sanctions are available against polluters who violate the air pollution ordinance?

A I think the single most important thing we have is the permit system, which is a permit to install and a permit to operate, and a revocation of the permit actually puts the man out of business.

We have an injunction procedure, and on the single violation we have a ticket procedure beginning at \$10 and ending up with a maximum of \$200 a day.

Q In addition to the sulfur content requirements contained in the ordinance, are there any provisions for emergency action whenever sulfur oxide concentrations reach a dangerous level?

A By the use of the telemetered air monitoring network we have instituted an incident control plan by which we require and by ordinance I have the authority to request certain sources of pollution, power plants and other large industrial users, to shift to a lower sulfur fuel during adverse meteorologic conditions.

[14] The entire program, or as much of it as we have developed, was in that paper I gave you on incident control strategy.

Q Just so I am clear on this, you have the authority to require these users to shift to a lower sulfur fuel?

A That is correct. We also have a hot line procedure with Commonwealth Edison on their sources, whereby they can very quickly shift to gas or low-sulfur fuel during certain periods, and also shift the power generating out of this area and into other areas.

Q Mr. Stanley, were you Chairman of the Policy Committee for the Northeastern Planning Commission?

A Well, I was—

Q Or have you been such Chairman?

A I was Chairman of the Policy Committee that did a study of the managing of air resources in northeastern Illinois, as it was presented under a 701 planning grant from the Housing and Urban Development Department. I am not Chairman of the Northeastern Illinois Planning Commission.

Q But you are Chairman of the Policy Committee which— [15]

A The Policy Committee for this particular study at this particular time.

Q In that capacity as Chairman of the Policy Committee, did you participate in formulating findings and recommendations regarding air quality in the Northeastern Illinois Region?

A Well, I do not think you can say "air quality."

Q Just let me withdraw the question. I get your point.

A That is bad semantics for us, because air quality is "qual" and "quan", and it becomes involved.

Q Did you participate in the drafting of certain actions to improve air quality contained in Report No. 6 of the Northeastern Planning Commission?

A Well, the basic intent of the study was, No. 1, to determine what the condition of the air was in the Northeastern Illinois sector, and second, what actions could be taken as part of the planning function to maintain this air quality or improve it, and at the same time ac-

commodate increased populations, [16] densities and so on.

Now, this was what we fundamentally addressed ourselves to. There were recommendations on how one could proceed in doing this, but there was no indication here to provide either air quality criteria or value judgments of whether the air is healthy or unhealthy. It was not that kind of a study.

Q Do you agree with the actions or recommendations set forth in the report?

A Fundamentally, I think I have to agree with most of them. Remember, there were three agencies here that were involved in this, the City of Chicago, Cook County, where most of the people are, the City of Chicago and Cook County, the other six counties and the State of Illinois, so everyone made their share of recommendations.

I think, however, that fundamentally it provides a departure point for looking at the air pollution problem in Northeastern Illinois and the way we have to address ourselves to it.

MR. HAUBOLD: Off the record, please.

(There was a discussion off the record, after which the taking of the deposition [17] was resumed as follows:)

MR. HAUBOLD: Mr. Reporter, will you mark this document as Defendants' Stanley Deposition Exhibit 1 for identification, please.

(The document was thereupon marked Defendants' Stanley Deposition Exhibit 1 for identification, 4-24-69.)

MR. HAUBOLD: Will you mark this document, please, Mr. Youker, as Defendants' Stanley Deposition Exhibit 2 for identification.

(The document was thereupon marked Defendants' Stanley Deposition Exhibit 2 for identification, 4-24-69.)

MR. HAUBOLD: And will you mark this document as Defendants' Stanley Deposition Exhibit 3 for identification.

(The document was thereupon marked Defendants' Stanley Deposition Exhibit 3 for identification, 4-24-69.)

[18] BY MR. HAUBOLD:

Q Mr. Stanley, I show you a document which has been marked Defendants' Stanley Deposition Exhibit 1 and ask you if you can identify this document as a copy of the technical report No. 6 of the Northeastern Illinois Planning Commission, entitled, "Managing the Air Resource", to which you have referred in your deposition.

A That is correct.

Q Mr. Stanley, I show you another document which has been marked Defendants' Stanley Deposition Exhibit 2, entitled, "A Report on Commonwealth Edison Company's Air Pollution Control Program", of the City of Chicago's Department of Air Pollution Control, and ask you whether this report is the report to which you referred in your deposition as being submitted by Commonwealth Edison?

A This appears to be the way it was presented to us by Commonwealth Edison, yes.

Q I now show you a document marked Stanley Deposition Exhibit 3 for identification, APA No. 68-172, entitled, "Chicago's Air Resource Management Program, Planning for Clean Air", and ask you whether this is a document produced by your office, [19] containing remarks made by you at the 61st Annual Meeting of the Air Pollution Control Administration in St. Paul, Minnesota, on June 27, 1968?

A That is correct.

MR. HAUBOLD: I have no further questions.

MR. SIMS: Mr. Stanley, I have only a few questions.

CROSS EXAMINATION

BY MR. SIMS:

Q Does the air pollution control ordinance delegate to an Appeal Board wide discretion in determining whether

to grant a variance to a particular individual or business?

MR. HAUBOLD: I object to the use of the term "wide discretion", unless you further define it.

BY MR. SIMS:

Q Wasn't this term "wide discretion" used in the statute?

A You would have to look back at the ordinance. I can't remember that part of it.

Q Well, does it—

A The Appeal Board has, really, the authority to question any decision I make, fundamentally.

.

[22] Q You testified that you contacted coal producers supplying coal to Chicago. Do you recall which ones you contacted?

A Oh, no. I can't remember what they were, but these were the ordinary channels that we found that were supplying coal to Chicago and Northeastern Illinois. I think we have that list around some place, if it is important.

Q Do you anticipate that coal will continue to be a major source for the generation of electricity in Illinois?

A Well, I think that energy from coal will be one source of power, whether it is burned in Chicago, whether it is cracked at the mine and the gas burned at Chicago, or whether it is burned at the mine mouth and so on, but coal itself, you see, will be a major energy source for Northeastern Illinois, obviously.

Q Is it not a fact that Commonwealth Edison's major generating stations consuming coal are located outside of the city of Chicago?

MR. HAUBOLD: I object on the basis that [23] it is ambiguous, what the term "major" means in that connection.

BY THE WITNESS:

A I think if you want this information on coal usage by plant, you can get this from Commonwealth Edison.

They have some large plants outside of the city, that is true, but the percentage of how they operate under various conditions and at various times of the year is quite flexible.

The trend has been to burn less coal in the city and to build larger power plants out of the metropolitan area, simply because you can't buy that much real estate to stack and pile it.

Furthermore, the technology of transmitting energy over high voltage lines has become more economical than transporting the coal over land or water, so the way they go at it is such that you will have to do a total balance on not only Commonwealth Edison, but all the other power companies that they are integrated with so that you can have some idea of how they operate.

We are primarily concerned with and I am legally limited to the activities in the city [24] of Chicago.

BY MR. SIMS:

Q Would you envision any difficulty for a large industrial consumer to obtain a variance to bring in high-sulfur coal, into the city, if he could show that he installed a control technique that would maintain sulfur oxides and particulate emissions within the prescribed limits of the ordinance?

MR. HAUBOLD: I object to that hypothetical and conjectural question on the grounds that Mr. Stanley has already stated that he believes such control technology is not presently available.

MR. SIMS: This is hypothetical. Would you answer the question, please, sir.

BY THE WITNESS:

A Well, the ordinance specifically states that there is relief in three areas. First, you can limit the fuel you are using, secondly that you can combine two or more—let me give you an example.

If a power plant had three boilers, you could put one of them in gas, one of them in low- [25] sulfur oil and one of them in high sulfur coal, so that all three of them

together, based on BTU, would not emit a certain percentage of sulfur.

This is in the ordinance and this, fundamentally, is the basis for the appeals that are being made.

Secondly, there is also a provision in the ordinance whereby anyone having a control device that will limit the amount of sulfur that is being burned can put this device in. Do you understand that, now?

MR. SIMS: Yes. I think so.

THE WITNESS: All right.

MR. SIMS: Now, let me ask you—

BY THE WITNESS:

A This is a flexibility we built into the ordinance because of technical problems.

BY MR. SIMS:

Q Mr. Stanley, is it not a fact that current total consumption by all consumers in Chicago is approximately eight to nine million tons of coal?

MR. HAUBOLD: I object to the question unless you can show that Mr. Stanley has [26] some means of knowledge with respect to this subject.

* * * *

[5]

EXCERPTS FROM DEPOSITION OF
FRED E. NICOSIN, TAKEN MAY 15, 1969

• • • • •
FRED E. NICOSIN,

having been first duly sworn to tell the truth, the whole truth and nothing but the truth, relating to said matter, was examined and testified as follows:

DIRECT EXAMINATION

QUESTIONS BY MR. REUBEN L. HEDLUND:

Q A few introductory words, Mr. Nicosin. First of all, are you appearing at this deposition by virtue of subpoena issued on you?

A Yes.

Q During my examination I will try to make my questions as understandable and as clear as possible. In the event that you don't understand what I have asked, please feel free to ask me to explain the question or to make it more understandable.

Also, in the event that you have not finished your answer to a question but I ask a new one before you have had a chance to complete your answer, please say that you haven't finished your answer so that we get your full answer. I will not do this intentionally, but while we are going along here I may inadvertently do that.

[6] Mr. Nicosin, would you please state your full name, address and business affiliation?

A Fred E. Nicosin, 611 Raymond Street, Plainsfield, Indiana, Vice President of Power, Public Service Indiana.

Q Would you please give us a brief description of your educational and professional background?

A I have been with Public Service forty-two plus years, having come up through the operating ranks. My education was acquired in the schools of Terre Haute and at Rose Polytechnic Institute. In 1966 I received a Master of Engineering honorary degree from that school.

Q Could you, sir, over the course of the last 15 years indicate what your function was with Public Service of Indiana?

A I'm not trying to tell you how to do it, but maybe if you would confine it to the last 11 years when I have been in headquarters. Prior to that I was a superintendent at a generating station out in the field. The scope of responsibility here in headquarters has been for the operation and maintenance of all the generating stations and the high voltage [7] transmission system of Public Service Indiana. And another major function has been either the direct negotiating and buying or overseeing the purchase of coal for Public Service of Indiana.

Q In your present capacity do you also have responsibility with respect to the actual or prospective purchase of other forms of energy for Public Service of Indiana, such as oil, gas, nuclear energy, that sort of thing?

A Yes, under my direction. Up until two years ago I did a lot of it personally, and since that time I work through what we call a fuel manager now, Mr. Masse-link.

Q For how long have you been with Public Service of Indiana involved in either coal purchasing or coal use or coal burning, the various areas in which people in a utility come into contact with coal?

A The answer to such a general question is the first job I had with Public Service in 1926 was operating a coal area which put the coal in the hoppers on top of the boiler. So in conjunction with coal I have pretty well run the gamut.

Q Of the electric utilities in the State of Indiana [8] serving the public, how does Public Service of Indiana rank in terms of kilowatt capacity?

A Nationally?

Q No, within the State of Indiana.

A Within the state? We are the largest capacity-wise in the State of Indiana.

Q Could you briefly describe the geographical areas served by Public Service of Indiana?

A We serve in 69 of the, I believe total of 92 counties, predominantly in the central section and the south-

east section. When I say central section, exclusive of Marion County.

Q Would you, sir, please name the generating stations presently operated by Public Service of Indiana?

A The Noblesville generating station located at Noblesville approximately 20 miles northeast of Indianapolis; the Markland hydrostation on the Ohio River near Markland, Indiana; the Gallagher generating station located at New Albany, Indiana; the Edwardsport generating station at Edwardsport, Indiana; the Dresser generating station southwest of Terre Haute, Indiana; the Wabash River generating station northwest of Terre Haute, Indiana; a small [9] station that we acquired last year at Rushville, Indiana, where we purchased the municipal facilities; and we have under construction a new generating station at Cayuga, Indiana; and we have an internal combustion peaking station at Wabash, Indiana.

Q As to each of these stations I would like to ask you a series of questions, and I think we will do it station by station, so that it will hopefully appear more orderly in the transcript.

The Noblesville station was constructed in what year, if you recall?

A 1950 it went in service.

Q And what is the approximate kilowatt capacity of that plant?

A One hundred megawatts.

Q In the year 1967 approximately how many tons of coal were consumed at that station?

A Approximately 78,000 tons.

Q Who was the supplier of that tonnage?

A The sales agency is Pickands Mather who represent Old Ben. Old Ben Coal Corporation, I think, is the right corporate name now. They have shifted around corporate-wise the last two or three years. I can't [10] hardly keep up with them.

Q And from which mine of Old Ben or which mines were the shipments being made?

A From the Enos and Blackfoot mines in southwestern Indiana.

Q Do you know approximately how far the Noblesville plant is from those two mines?

A As I recall, approximately 135 miles.

Q Did all the coal shipped from those two mines in 1967 to the Noblesville plant arrive by rail?

A Yes.

Q Do you know on which railroad?

A The delivering road is the Nickel Plate. The originating road is—I'm not sure whether that gets into that private railroad down there or not.

MR. CAMPBELL: Off the record a minute.

(Discussion outside the record)

Q The delivering carrier is the Norfolk & Western, successor to the Nickel Plate?

A Right.

Q And you do not know the name of the railroad that is the originating carrier?

[11] A I think it is the Penn Central.

Q Is the Noblesville plant served by any other railroad other than the Norfolk & Western?

A No.

Q At the Noblesville plant are you presently purchasing and were you purchasing in 1967 coal under a long term contract?

A Yes. What is your definition of long term?

Q Well, in excess of one year.

A Yes.

Q Could you give me the length of that contract in terms of years and the year in which it was first effective and its termination year?

A As I recall, the originating date was November 1, 1962, the termination date December 31, 1971.

Q Mr. Nicosin, according to the 1968 edition of Steam-Electric Plant Factors the average cost per ton f.o.b. plant at Noblesville was \$6.49. Is that approximately correct?

A Yes.

Q That would include transportation, would it not?

A Yes.

Q Can you give me the approximate percentage of the [12] delivered cost of coal to that plant represented by transportation charges?

A Approximately 37 percent.

Q To your knowledge, has the facility at Noblesville ever been served by a mine or mines located within the State of Illinois?

A No.

MR. SIMS: Would you give me that question back?

(The Reporter read back Q28)

A Not to my knowledge.

Q I'd like to turn now to the Markland hydroelectric plant on the Ohio River. Approximately how far west of the Ohio state line is that plant located?

A I don't know that answer. It's approximately 20 miles upstream from Madison, Indiana. As I recall, it's about half-way between—well, that's as near as I can get it. It's within three miles of Vevay, Indiana—
V-e-v-a-y.

Q And when was that plant constructed?

A Either April '67 or April '68.

Q Within the past two years?

[13] A Yes.

Q What is the kilowatt capacity of that plant?

A Eighty-one megawatts; eighty-one thousand kilowatts.

MR. SIMS: Mr. Hedlund. I'm going to interrupt at this point. We understood from your last pre-trial conversation from your remarks that you intended to conduct this deposition to elicit facts that were set out in these questionnaires sent to consumers. You are asking Mr. Nicosin questions that were not asked in the consumer questionnaire. Do you plan to ask all electric utilities that received this questionnaire these similar questions that you are asking Mr. Nicosin about plants that are not coal consuming?

MR. HEDLUND: I may, yes indeed.

MR. SIMS: All of the electric companies?

MR. HEDLUND: I'm not certain all, but I certainly will cover this subject.

MR. SIMS: I thought the whole purpose of sending out the questionnaire was to reduce the deposition time and discovery period. This is defeating the purpose now.

[14] MR. HEDLUND: May we continue?

Q Is that plant able to burn coal or any other fuel?

A No.

Q Has that plant been an efficient generating station and a satisfactory performer?

A Yes.

MR. CAMPBELL: Off the record again.

(Discussion outside the record)

Q Does that plant use oil for start-up and emergency purposes?

A We have an auxiliary diesel driven generator that burns oil and is used in case the station is out of service or trips out of service, and this is for protection or to furnish power for sump pumps and lubricating oil and so forth for protection of the equipment.

Q With respect to the Gallagher plant now, would you tell me where that is located?

A It is located on the Ohio River at New Albany, Indiana, across from Louisville.

Q When was that station built?

A The first unit went in service in December, 1958, [15] the fourth unit in 1961.

Q Approximately what is the kilowatt capacity of that plant?

A 637,000 kilowatts maximum.

Q That is a coal burning station, is that correct?

A Right.

Q During 1967 who were the coal suppliers for that station?

A The Pittsburg & Midway Coal Mining Company, the Peabody Coal Company, and Ayrshire Collieries through their agent, Republic Coal & Coke Company.

Q Which mines of Pittsburg & Midway serve that plant?

A In 1967 it was the Paradise mine.

Q Do you know where that is located?

A It is located, I think, in Muhlenberg County, Kentucky.

Q In 1968 were you also receiving shipments from the Paradise mine?

A From the Paradise mine, and Pittsburg during that year opened a new mine called Drake. So both mines now serve the station.

Q Where is the Drake mine located?

A Nearby in the same county, located on the Green River.

[16] Q In Kentucky?

A In Kentucky, western Kentucky.

Q From which mines of Peabody was Gallagher receiving shipments in 1967?

A The River Queen mine in western Kentucky and the Lynnville mine in Indiana.

Q Can you indicate approximately where the River Queen mine is located and the Lynnville mine?

A It's in the same county.

Q Muhlenberg County?

A Muhlenberg County. The Lynnville mine is in southern Indiana near a town called Lynnville.

Q From which mines of Ayrshire was the Gallagher plant being supplied?

A Gibraltar mine which is in the same west Kentucky area on the Green River.

Q During 1967 by what means of transportation was coal received at the Gallagher plant?

A By barge, river barge.

Q All barge?

A All barge.

Q Does that plant have rail facilities?

A It does not; it does not have a rail unloading facility. It has rail service but not coal unloading [17] facilities.

MR. CAMPBELL: Off the record again.

(Discussion outside the record)

Q Mr. Nicosin, what is the difference between rail service to the plant and a rail or coal unloading facility?

A Well, we have a railroad in there to haul supplies, repair parts, chemicals, but there is no rail unloading facility whereby you can unload a car of coal, a railroad car of coal.

Q Mr. Nicosin, according to the 1968 edition of Steam-Electric Plant Factors at page 11, the average cost per ton f.o.b. plant of coal to the Gallagher station is stated at \$4.36 a ton. Is that accurate?

A Approximately, as far as the average.

Q With respect to your shipments in 1967 at Gallagher, what percentage of the delivered costs was represented by transportation ex costs.

A About 21½ percent.

Q To your knowledge, has the Gallagher facility ever burned coal produced by a mine or mines located within the State of Illinois?

A Not to my knowledge.

[18] MR. SIMS: Counsel, do you intend to ask him who supplied this plant in 1966?

MR. HEDLUND: No, I don't.

MR. SIMS: Wasn't this asked by the questionnaires?

MR. HEDLUND: Yes. Would you like me to ask it?

MR. SIMS: It was our impression, counselor—

Q Well, let me ask this question: With respect to your generating stations were your suppliers the same in 1966 as they were in 1967?

MR. SIMS: Take your time in answering that, Mr. Nicosin.

A That's too big a question for all generating stations. I'd have to think that out in big detail.

Q All right. I'd like to turn now to the Edwardsport facility. Could you tell me first where that is located?

A Approximately 17 miles northeast of Vincennes, Indiana, on the White River.

Q I'm sorry, I'm going to have to return for a moment [19] to the Gallagher facility.

In 1967 what was the approximate tonnage shipped to the Gallagher facility by Pittsburg & Midway?

A Approximately 796,000 tons.

Q Was that under a long-term contract?

A Yes.

Q What was the beginning and ending date of that contract?

A The original beginning date was April 1, 1956 prior to the start of the plant. Since that time it has been amended. Now the expiration of the present amendment is December 31, 1972.

Q What was the original expiration date?

A I cannot answer that without checking further.

Q Approximately how many tons in 1967 did Peabody ship to that plant?

A Approximately 581,000.

Q Was that under a long-term contract?

A Yes.

Q What were the beginning and ending dates of that contract?

A The original contract also began in 1956 and has since been amended, and the most recent amendment was [20] from April 1, 1961 to December 31, 1972.

Q Approximately how many tons were shipped by Ayrshire in 1967 to the Gallagher plant?

A Approximately 273,000.

Q And was that under a long-term contract?

A That contract originally started in January 1, 1961, and expires December 31, 1970.

Q Now, if I may return to the Edwardsport plant, when was that constructed?

A The original construction was way back in the early twenties, and we have retired some units from there. Of the units that are now in service there, to the best of my knowledge, the oldest unit was about 1940 and the other two units have been installed since then. I would guess the oldest unit is about 1944, something like that.

Q How far, approximately, from the Illinois state line is Edwardsport located?

A Eighteen, nineteen miles. I guess right across the bridge is Illinois, isn't it, so it would be eighteen, nineteen miles.

Q In 1967 who were the suppliers of Edwardsport? That is a coal burning facility, is [21] it not?

A Yes, and again this station uses oil for light-off purposes.

The suppliers in 1967 were the Peabody Coal Company and the Sunshine Coal Corporation.

Q Approximately how many tons of coal in 1967 were shipped by Peabody?

A 346,000.

Q From which mines of Peabody, if you recall?

A From the Hawthorn mine north of Sandborn, Indiana.

Q Were those shipments made by Peabody pursuant to a long-term contract?

A Yes, their contract at Edwardsport runs from May 7, 1962 to December 31, 1971.

Q Could you tell us, please, sir what the Sunshine Coal Cooperative is?

A The name in 1967 was the Sunshine Coal Corporation which was a cooperative operation operating a small shaft underground mine in the near vicinity to Bicknell, Indiana.

Q I'm sorry, where was that?

A Bicknell—B-i-c-k-n-e-l-l.

Q You say this was in 1967. What change, if any, [22] took place with respect to this cooperative in 1968?

A I don't know whether I can keep up with them or not.

Q Is the mine still operating?

A No, it's not operating as of today. To the best of my knowledge, the cooperative group are attempting a refinancing program to continue the mine in operation, but to the best of my knowledge the last couple of months they have not been successful.

Q Approximately how many tons were shipped in 1967 by Sunshine to Edwardsport?

A 27,000, and that was by truck.

Q That was by truck?

A Right.

Q How were the shipments from the Peabody Hawthorn mine received at Edwardsport?

A By rail; Pennsylvania Railroad, which is now Penn Central.

Q Is that the delivering carrier at Edwardsport?

A Yes.

Q Is that facility served by any other railroad?

A No.

Q Do you know what the originating carrier is from [23] the Hawthorn mine?

A Pennsylvania all the way.

Q It's a single line haul?

A Right.

Q According to the 1968 edition of Steam-Electric Plant Factors on page 11 it is stated that the average cost per ton f.o.b. plant of coal at Edwardsport in 1967 was \$4.39. Is that approximately correct?

A Yes.

Q Of the delivered costs of the coal shipped by Peabody to Edwardsport in 1967, what percentage was represented by transportation?

A You asked the percentage by Peabody?

Approximately 15 percent.

Q Would you be able to give me the percentage with respect to the Sunshine shipments?

A Approximately 18 percent.

Q How far is the Sunshine mine, or was the Sunshine mine, from Edwardsport?

A Approximately seven mile.

Q Seven miles?

A Right.

Q Were the shipments by Sunshine pursuant to a long- [24] term contract?

A It's a five-year contract.

Q How are they presently meeting their commitments under that contract?

A They are not presently as of today meeting their commitments. During the year of 1969, during this period of, I guess you could call it reorganization or refinancing, they had been furnishing coal as a sales agency from some other mines.

Q Are those mines located in Indiana, if you know?

A I'm sure they're in Indiana but I can't give you the names of the mines. They're small, very small operations.

Q Is their coal still coming by truck?

A Yes.

Q From these mines?

A Yes.

Q To your knowledge, has the facility at Edwardsport ever burned coal from any mine or mines located within the state of Illinois?

A Not that I can recall.

Q Could you tell me the approximate location of the Dresser plant?

[25] A Approximately ten miles southwest of Terre Haute, Indiana.

Q Is that on the Wabash River?

A Yes.

Q Approximately how far is that station from the Illinois state line?

A Three to four miles.

Q When was that station constructed?

A The original unit went in service in 1923.

Q What is the present kilowatt capacity of the station?

A Approximately 200,000 kilowatts.

Q I neglected to ask you the generating capacity of the Edwardsport facility.

A 165,000 kilowatts.

Q Could you please, sir, for the year 1967 give me the approximate tonnages shipped by coal producers to Dresser?

A 248,000.

Q And that was by whom?

A By Ayrshire, shipped by truck.

Q From which mine?

A Chinook mine near Staunton, Indiana, approximately 12 miles east of Terre Haute.

[26] Q How far is the Chinook mine from the Dresser facility?

A Roughly 22 miles.

Q Is the Dresser facility able to receive coal by barge?

A No.

Q Why is that?

A The Wabash River is not navigable nor do we have barge unloading facilities at Dresser.

Q By not navigable, you mean up to that point?

A That's right.

MR. CAMPBELL: Off the record again.

Q For coal barges?

A To my knowledge there's never been a coal barge on the Wabash River.

MR. CAMPBELL: Off the record just a minute.

(Discussion outside the record)

Q Do you have rail unloading facility at Dresser?

A Yes.

Q What railroad is—

A Penn Central.

Q Penn Central?

[27] A Right.

Q At Dresser in 1967, the 1968 edition of Steam-Electric Plant Factors indicates the average cost per ton f.o.b plant of coal to have been \$4.59 a ton. Is that approximately correct?

A Yes.

Q Of the delivered cost of coal in 1967 to Dresser, approximately what percentage of that was represented by transportation costs?

A Sixteen percent.

Q Were the shipments by Ayrshire to that plant pursuant to a long-term contract?

A Yes.

Q What were the dates of that contract?

A January 1, 1964 to December 31, 1978.

Q To your knowledge has the Dresser plant ever burned coal produced in any mine or mines located within the state of Illinois?

A Well, there's a technicality here. Originally Dresser plant was served by the Dresser mine which is adjacent to the plant. The mine has entries that go underground beyond the Indiana line.

Q So that the coal may have come from Illinois but the mine was located in Indiana?

[28] A The mine tippie and preparation plant was in Indiana, but underground I think it extended into Illinois.

Q Other than that instance—

A Other than that, I know of no Illinois mine that has served the plant.

Q Where is the Wabash River facility of Public Service of Indiana located?

A Approximately eight miles northeast of Terre Haute on the Wabash River.

Q Is this station upriver from Dresser?

A Yes.

Q Approximately how far east of the Illinois state line is that plant located?

A Again, roughly three to five miles.

Q What is the kilowatt generating capacity of Wabash River?

A 887,000 kilowatts.

Q And when was that facility originally constructed?

A The first unit went in service in 1953 and the last unit, the No. 6 unit, went in service in June of last year, 1968. There are six units at the station.

Q During 1967 who were the suppliers and their approximate tonnages to the Wabash River facility?

[29] A Peabody Coal Company with approximately 1,125,000 tons; Ayrshire Collieries, 548,000 tons.

Q Were the Peabody shipments pursuant to a long-term contract?

A Yes.

Q Would you give me those dates, please, sir?

A Original date was April, 1964, amended in 1968 and expires in December 31, 1978.

Ayrshire, January 1, '64, December 31, 1978.

Q From which mines of Peabody were shipments received at the Wabash River facility in 1967?

A In 1967 mostly from the Hawthorn mine, and there may have been some lesser portion from Airline.

Q We have already established the location of the Hawthorn mine. Where is the Airline mine of Peabody?

A The Airline mine is south of Linton, Indiana, or approximately six miles northeast of the Hawthorn mine.

Q How were the Peabody shipments of coal to Wabash River received in 1967?

A By rail.

Q What railroad serves Wabash? Is that the Penn Central?

[30] A The Milwaukee.

Q The Milwaukee?

A Unit train haul.

Q On the unit train haul to Wabash River from Peabody who owns the cars?

A The railroad. The Ayrshire coal is a part of the same unit train.

Q And from which mine of Ayrshire?

A From the Minnehaha which is near Dugger, Indiana.

Q How far is the Minnehaha mine from either Hawthorn or Airline, do you know?

A May I borrow your map a minute?

(Witness examines document)

Let's see, you want to know from Hawthorn to the Minne, is that it?

Q Yes, sir.

A Somewhere between five and ten miles. Is that close enough?

Q On a one particular haul will this train collect coal from both Ayrshire's mine and Peabody's mine?

A Right.

Q Approximately how many tons does that train deliver [31] to Wabash River per haul?

A In 1967?

Q Yes, sir.

A As I recall, it's about a 7200 ton train. Now, there is a qualification. The Milwaukee pulls the coal from the Minnehaha mine and the Pennsylvania pulls the coal from the Hawthorn mine and brings it over to Bee Hunter junction where it is then made up with the Ayrshire coal into the Milwaukee unit train, so there are two railroads involved.

Q What is the approximate tonnage of the unit train that must be carried a year?

A There are several increments with a different tariff with each increment.

Q By increments, that means the tariff increases as the total tonnage for the year decreases?

A Right. They are annual minimums.

Q Can you for 1967 give me the approximate minimum tonnage?

A That determined the freight rate?

Q That determined the freight rate.

A Yes, 1,300,000, I think it is.

Q Is it fair to say below that your cost per ton or the tariff was increased?

[32] A Right.

Q And above it was decreased?

A Right.

Q Presently what is the minimum tariff tonnage, if that is a proper phrase?

A We added another increment of 2,000,000 tons which reduces the tariff.

Q Do you know offhand in, let's say, 1968, how many trainloads a week you would receive at Wabash River?

A Normally five trainloads with some intermittent six-day shipments.

Q How long does it take you to unload a unit train at Wabash River?

A We have in the tariff a 12-hour unloading time.

Q Do you know how long Peabody and Ayrshire are allocated in the tariff to load the train, or load their portion of the train?

A They have 17 hours.

Q According to the 1968 edition of Steam-Electric Plant Factors there is indicated that at Wabash River in the year 1967 the average cost per ton of coal f.o.b. plant was \$4.36. Is that approximately [33] correct?

A Yes.

Q Or was that approximately correct?

A Yes.

Q With respect to the shipments received in 1967 at Wabash River, approximately what percent of the delivered cost of coal was represented by transportation costs?

MR. SIMS: For which company?

MR. HEDLUND: Well, let's take the total first.

A Well, the freight from either company was the same.

Q Was the same?

A Because of the unit train rate, and it was approximately 12 percent.

Q To your knowledge, has the Wabash River facility ever burned coal produced in any mine or mines located within the state of Illinois?

A Well, again now—

Q And excluding the one mine that ended up under the state of Illinois.

A To my knowledge, no, they did not burn any from a [34] mine in Illinois.

Q In 1967 was Public Service of Indiana operating the Rushville power plant?

A No, not in '67.

Q Do you know at present who is supplying the Rushville plant?

A The coal purchased for Rushville is not by contract, it is by purchase order, and normally will come from either Peabody or Ayrshire.

Q Do you know which mines are involved?

A It comes by truck—no, excuse me, I'm wrong. It comes by Pennsylvania, delivered by Penn Central. I'm not sure without asking.

Q The 1968 edition of Steam-Electric Plant Factors indicates that that facility consumed 19,000 tons of coal in 1967. Is that, to your knowledge, approximately correct?

A At Rushville?

Q Yes.

A I have no knowledge of how much coal they consumed in 1967. It was not under our operation.

Q Do you know at present on an annual basis how much coal that facility is consuming?

[35] A On the basis on which we are operating it?

Q Yes.

A It will not reach 1,000 tons per year.

Q Is that because the load or capacity of Rushville has been taken up by your other facilities?

A That's because of the excessive cost of generation on this Rushville plant whereby we can serve our customers at a lesser rate from our other stations.

Q I see. Do you recall what the generating capacity of that plant is?

A It is now rated at 4,000 kw.

Q Kilowatts.

A Four megawatts.

Q You have one additional facility that I don't think we have covered or specifically named. That is the peaking station which you referred to prior. Where is that located?

A In our substation at Wabash, Indiana.

Q Can you tell us approximately where in the state Wabash, Indiana is located, for us in Chicago?

A With relationship to what?

Q Indianapolis, say.

(Witness examines map)

[36] A I'd say Wabash, Indiana is on the Wabash River approximately 75 miles north and a little east of Indianapolis.

Q What fuel is burned at that station?

A Oil.

Q And what is the capacity of the station?

A Winter rating is 75,000 kw.

Q Is that station equipped to burn coal?

A No.

Q When was that built, if I may ask?

A '68.

Q 1968?

A Yes.

Q You presently have a new generation station under construction, is that correct?

A Yes, sir.

Q Would you give us the name of that and its approximate location?

A It will be the Cayuga generating station and is located on the Wabash River near the small town of Cayuga, Indiana, approximately 20 miles southeast of Danville, Illinois.

Q Approximately how far is that station from the [37] Illinois state line?

A Approximately two to three miles.

Q Is there more than one generating unit involved or will be involved at Cayuga?

A Yes, the first unit is scheduled for in service in summer of 1970 and the second unit the summer of 1972.

Q Are these equal sized units?

A Five hundred megawatt units each.

Q When did planning of the first unit begin?

A I would say approximately 1965.

Q Are these to be coal fired generating units?

A Yes.

Q When both units come in operation how many tons of coal per year will that facility burn?

A Two million eight hundred thousand to three million tons per year at full capacity.

Q When you began looking for a coal supplier for this plant, could you tell me what, if any, requirements with respect to the term of the contract or the amount of coal reserves you had in mind?

A If I understand your question properly, it was our thinking that we should have either under contract or [38] available to support this station location 70,000,000 tons of coal, which in our thinking is a 30-year consumption.

Q Why did you want to have under contract or available to this plant as much as 70,000,000 tons or 30 years worth of coal?

A Well, the main reason is that if you locate a generating station based on a particular delivered coal cost or cost into the boilers and you do not have sufficient coal to last the 30 year life of that station—30 years plus—then it's possible that in the remaining years of the station your coal costs would be so high that you might have picked the wrong location for the station. And we try to look at the average production costs or the predicted production costs over the life of the station, so that we try to supply it or locate it such that it will have a minimum coal cost during its life. In other words, we couldn't take the chance that, let's say, for 15 years

we had a coal supply, and then if we had to go two or three hundred miles away to find coal to supply that plant, we could have put it in the wrong location.

[39] Q Might you also have chosen the wrong fuel?

A It could have been also that we chose the wrong fuel.

MR. SIMS: Object to leading by counsel.

Q You have announced, have you not, who the supplier of the coal to this plant will be?

A We have a letter of intent with the Peabody Coal Company and have a contract in the process of negotiation.

Q How long will this contract be and for approximately how many tons?

A The contract will be definitely for 15 years with several options to continue for the second 15 years. So in effect technically you can call it a 30-year contract.

Q These options are yours?

A Yes.

Q Approximately how many tons then would be involved over the 30 years?

A Over the 30 years, 70,000,000 tons.

Q Will this coal come from an existing mine of Peabody?

A No, it will come from a new mine now being built.

[40] Q Where is that mine to be located?

A It's located near Universal, Indiana, which is approximately ten miles northwest of Terre Haute, Indiana.

Q And approximately how far from the Cayuga station will this mine be?

A Thirty to thirty-five miles.

Q You say this mine is presently under construction?

A Right.

Q When is it expected to reach capacity, if you know?

A Oh, it's expected to load the first coal in January, 1970, and of course, will not reach full capacity until we have our second unit ready to consume the coal, which is 1972.

Q How will the coal get from the new Peabody mine to the Cayuga station?

A By unit train or the present C&EI Railroad.

Q Will this be in shipper or railroad owned cars?

A It will be in utility owned cars. We will own the cars.

Q Will this involve more than one railroad?

A No.

Q It is a single line?

[41] A It's a single line haul. The reason I qualified C&EI, as of now, they're in the throes of being purchased by L&N.

Q Will the cost per ton on this unit train be less than 50 cents a ton, assuming the minimum tariff shipments are reached?

A Yes.

Q What are the minimum shipments under the tariff?

A Well, again this tariff will have several annual increments, in that the first two years the one unit will only burn approximately a million four to a million five hundred thousand tons.

So if I recall properly, we have increments of one million, two million and two and a half million annual minimums, and each carries a different tariff. Naturally the two and a half million is the lower tariff, lowest of the three.

Q Mr. Nicosin, you have testified that with respect to your existing and planned coal fired generating stations you are not aware of any coal being burned at these stations produced at mines located within the state of Illinois, other than the exception that we have talked about where the actual shaft may go across the state line or the—

[42] A Entry, they call it.

Q Entry. Can you tell me why this is?

A Mainly because the transportation is a large part of the delivered cost, and it has been to our advantage to date—we have been successful in acquiring lower costs because of this transportation within our own state and nearer each plant. As you can well see from the location of the mines I have mentioned, most of the plants are served by a mine nearby, very nearby. Naturally this is to reduce the transportation costs.

Q Mr. Nicosin, I'd like to show you what has been previously marked as Nugent Deposition Exhibit 1.

I do this not to examine him on the basis of this, but to give him an idea of the geography involved, and if you have another map you prefer to use, I'd be willing to use that.

MR. FUTTERMAN: This is Nugent Deposition Exhibit 37.

MR. HEDLUND: Well, whatever the exhibit number is of the Jack Simon map of 1966 entitled Shipping Coal Mines in Illinois.

[43] **Q** Mr. Nicosin, with respect to any of your generating stations, do you believe it likely that any mine located in the Fulton-Peoria shipping district as designated on this map, which is basically west of the Illinois River in the vicinity of Peoria and Havana, Illinois, do you believe any of those mines would be able to compete for the coal business of your facilities in Indiana?

MR. SIMS: Object; it's speculative.

MR. HEDLUND: You may answer.

A It is very doubtful in that the area you have pointed out is so far away from any of our plant locations, that it's reasonable to believe that we can buy at a better price near our plants.

Q Would the same be true with respect to mines located in the area designated on the map as Springfield?

MR. SIMS: The same objection.

A I would guess the answer is the same.

Q What about the area designated as Belleville?

MR. SIMS: The same objection.

A I would guess the answer is the same. I don't think [44] we could afford to buy coal any place in Illinois unless it was near the Indiana line.

Q Mr. Nicosin, are you familiar with the location of the present mines of the United Electric Coal Companies?

A No.

Q Are you familiar with the present location of the mines of Freeman Coal Corporation?

A No, I am not.

Q I'd like to ask you to assume that the mines of the United Electric Coal Companies are located in the Fulton-

Peoria area that appeared on the map and the Belleville area, and that the mines of Freeman are located in the southern Illinois area and the Springfield area as shown on the map. With that assumption in mind, and having also in mind your prior testimony, has the common ownership of these two coal companies by General Dynamics had any effect on Public Service of Indiana in any way?

A Not to my knowledge, since I was unaware that General Dynamics even owned them.

Q Would there be any disadvantage or detriment to [45] Public Service of Indiana if this common ownership were to continue?

MR. SIMS: Object as speculative; opinion.

MR. HEDLUND: Well, it strikes me, counsel, that the charging paragraph in your complaint speaks in terms of likelihood of effect on competition, and this is exactly what I am trying to explore, from those mines most likely to be affected or not affected at all.

Do you have my question in mind?

A Will you try it again?

MR. HEDLUND: Will you read the question?

(The Reporter read the following question: "Would there be any disadvantage or detriment to Public Service of Indiana if this common ownership were to continue?")

MR. SIMS: You're asking him for a legal conclusion, which was the basis of the complaint, and it is therefore an opinion that Mr. Nicosin is not in a position to give.

MR. HEDLUND: I am asking Mr. Nicosin's [46] economic judgment and his opinion.

I'm sorry, we have had a lot of interruptions. Would you like the question read again?

THE WITNESS: No.

A Not to my knowledge can I see it would have any effect.

Q Would there be any benefit to Public Service of Indiana if the court were to require General Dynamics to divest itself of its ownership of the United Electric Coal Companies?

A I can't see that there would be any benefit.

Q During the process of the decision making with respect to the Cayuga plant, did you investigate other forms of energy as fuel for this station?

A Yes.

Q And which were those?

A Nuclear.

Q Were there any others?

A Well, when you say investigate, I can answer that naturally it goes through our mind is gas or oil available at an economic price, and we already know that it was not. So when you say investigate, we [47] do not make any direct contact as a result of that. So the two uppermost forms of energy available to us at a price was nuclear or coal.

Q Have you in the past considered the use of pumped storage?

A Yes. We have not in conjunction with the Cayuga operation, but for the company as a whole.

Q By pumped storage I meant pumped storage of water.

A Yes.

Q I say that for the benefit of those who may read this who are not as familiar as we'd like to think we are with the facts and the industry. Have you recently approached the natural gas companies in the state of Indiana with respect to the possible use of natural gas as a generating fuel?

A Yes, within the last six months we have approached gas companies with regard to our Noblesville generating station because of the escalated rates that we now pay at Noblesville that we think are way too high, and we investigated to see if we could find another fuel such as gas that was cheaper than the delivered cost of coal.

[48] Q Is Public Service of Indiana presently sponsoring research with respect to nuclear energy?

A Yes. We are a participant in a Westinghouse project for the development of a fast breeder reactor in which there are a number of utilities and other interested people that make contributions. We are also a participant in a 15-company study group headed by our consulting architect engineer, Sargent & Lundy, whereby represent-

atives of these companies meet twice a year to review the progress and status of nuclear plant construction and costs.

Q With respect to future expansion of your generating facilities, either expansion of existing ones or new facilities, does Public Service of Indiana have a policy with respect to the fuels or other forms of energy that will be used?

A Do we have a policy?

Q Yes, do you have a policy or general approach in your planning and thinking with respect to expansion and additional construction?

A I guess you could call it a general policy, but it will be our position to build and design the plant to utilize the most economical fuel available.

[49] Q Will this include fuels other than coal?

A Yes.

Q Are pending or proposed air pollution regulations of concern to Public Service of Indiana?

A Yes.

Q Have you had any experience with the desulphurization developments of Combustion Engineering?

A How did you phrase that? Have I had any experience?

Q Yes, have you had any experience or dealings with Combustion Engineering regarding the desulphurization of fuel gases?

A I have had explanations of the experimental projects they had in conjunction with Detroit Edison River Rouge plant,—I don't know whether it's River Rouge or St. Clair Rouge—where they carried on the research, and Combustion Engineering made contacts with us as to whether we were interested in putting in the original installation which is now going in at Union Electric.

As far as experience, my experience is only from the knowledge that they imparted with regard to that project.

Q What was your response or what was the response of [50] Public Service of Indiana to the approach by Combustion Engineering?

A The response was that we were not interested at this time.

Q And why was that?

A We did not think that the developments were far enough along to justify the expenditure that it would take to do the job properly for the amount of money involved.

Q To your knowledge, has your forecast proven correct?

A From word-of-mouth information, yes.

MR. SIMS: Move to strike the answer as hearsay.

Q Mr. Nicosin, what would you think of someone who told you that coal is coal?

MR. SIMS: Object. That is too general, too vague. What do you mean, coal is not coal compared to oil or gas, atomic energy, counselor?

MR. HEDLUND: You may answer.

A There's a lot of variations and kinds of coal. "Coal is coal" is not an informative statement.

[51] **MR. SIMS:** Nor the question.

Q Would it be a statement likely to be made by someone knowledgeable with respect to coal?

A No.

Q When you are purchasing coal for any of your facilities, or indeed for any of the equipment or different kinds of equipment within a particular facility, are the characteristics of coal important?

A Very definitely. The characteristics must be compatible with the boiler design for proficiency and low cost operation.

Q Which characteristics are important in that connection, of the coal?

A Well, there are a number of characteristics such as ash, moisture, BTU, volatile matter, the iron and aluminum and silica in the ash. These are all erosive and corrosive elements. The fusion temperature, the initial softening temperature, the grindability. These and other factors are all important and have some bearing on the type of equipment you design and buy.

Q As well as the type of coal which you purchase?

A I don't quite understand.

[52] **Q** I suppose what I am saying is, is it a chicken and an egg, which comes first, you design the boiler to

fit the coal or do you buy the coal to fit the boiler or do you do both?

A You do both.

Q Do you have any facility where you have got different types of equipment burning coals with different characteristics?

A Yes, we have at our Edwardsport station what is called a wet bottom boiler which must have coal that the ash will flow in a molten form into a receiving slag tank. The other boilers in that station won't handle as well the same kind of coal because they have dry bottom boilers. So we have had some trial or necessity spot burnings whereby we had to put one kind of coal in one boiler and one in the other. Otherwise we would have some malfunctions or poor operations.

Q Physically how do you handle at this facility keeping the coal going into the right boiler?

A It is the responsibility of the coal handling personnel to change their conveyor belt so that it puts the right coal in the bunker for the respective boiler.

[53] Q Do you keep the coal in separate piles?

A Well, not insofar as the storage. What I am referring to, normally we unload straight from the cars or the transportation facility into the bunkers, so that in a given train if we had two kinds of coal in the train they would unload the one kind of coal and divert or cause their conveyor belts to put that coal into the bunker of this boiler, then they would change their equipment so that the conveyor belts put the second kind of coal into the other boilers. This is a manipulation of the conveying equipment.

Q Are any of your facilities buying a blend of coal from either different mines or different seams?

A Yes, at the present time our Wabash River station is buying a combination of veins 3, 6 and 7. The Gallagher station is receiving veins—I'm not sure this is exactly right—9, 12 and 13 out of west Kentucky.

Q Are the three seams involved, 3, 6 and 7 or 9, 11 and 12, I believe you said—

A Nine, twelve and thirteen.

Q —Nine, twelve and thirteen, are these blended in a specific proportion or can you vary it?

[54] A It can be varied, but there is a certain limitation. For example, at Wabash River station the last unit we placed in operation, No. 6 unit, the maximum of the No. 3 vein that we can properly handle without adverse effect is 30 percent. And even if you get 30 percent of No. 3 you have to have at least another five percent,—what I'm saying is 35 percent of No. 7 to temper the No. 3. The percentage of No. 6 can vary in accordance with the amount of these two. No. 6 is not a limiting factor.

Q What would happen if you were to get a shipment of 60 percent No. 6, 20 percent No. 3 and 20 percent No. 7, and tried to burn it?

A That would not be too bad a blend. Normally we need five percent more of No. 7 than we do No. 3, so there would be some slight adverse effect.

Q Suppose you had 60 percent No. 7 and 20 percent No. 3 and No. 6?

A Very good. It would operate very good. The thing we don't want to do is to get more than 30 percent No. 3. If we do, we not only have the possibility of pluggage which causes a reduction of output, but it also increases our wear and tear on [55] the coal processing equipment.

Q How is this blending of the three seams, say 3, 6 and 7, how is that actually accomplished? Is that done by the producer, and are all three of these seams from the same mine?

A Well, the word "mine" is not quite right here. You have to call it a pit. No. 3 comes out of one pit and the No. 6 and No. 7 come out of the other pit. No. 7 is on top of No. 6. So they are transported then to the processing plant, and as they are unloaded and go through the washing plant then they are blended together so that the product that comes out into the cars from the processing plant is blended.

Q With respect to the facility that we have been talking about using this blend, would a producer who could only sell you No. 3 seam coal be able to compete for that business?

A Not for this particular unit. They could if you are still in the design throes. You could alternate the design of the boiler to handle No. 3, at an extra cost.

Q With respect to the boiler design at Cayuga plant, [56] who designed the boilers there?

A Combustion Engineering.

Q Did they require you to provide them with the characteristics of the coal that was going to be burned?

A Yes. Now, let me add here that coal has enough variation that they have to design within a range. I'm not saying that it's a science, it's that accurate, but definitely they have to know the range of characteristics that this coal will have to be compatible with their design.

Q Were your initial specifications to Combustion Engineering satisfactory?

A For Cayuga?

Q Cayuga.

MR. SIMS: Satisfactory for what, counsel?

MR. HEDLUND: I am asking if they were sufficiently specific.

A Yes, for Cayuga, as far as I remember.

Q I'm sorry, I guess I didn't get your answer.

A As far as I can recall, they were satisfactory for design of the Cayuga plant.

[57] Q What about the Wabash facility?

A Well, originally the coal that was to be provided for Wabash 6 was to come from the Chieftain mine which had different characteristics than the coal that we are now buying. So when Peabody elected not to expand their Chieftain mine but to open a new mine which would be this 3, 6, 7 blend, we had to go back to the boiler manufacturer and make some alterations.

Q What was the cost of those alterations? I mean, were they minimal or substantial?

A Well, in the general area of half a million, if that fits—I don't know what your terminology is.

Q To me, sir, that would be substantial. Are you aware of any utility that is burning coal produced at a mine that is also serving you that you can't burn?

Is that question clear?

MR. SIMS: Repeat the question, please.

(The Reporter read the following question: "Are you aware of any utility that is burning coal produced at a mine that is also serving you that you can't burn?")

[58] Q Let me rephrase it. Is there some mine presently serving you that produces a type of coal which you cannot burn but which is being burned by another utility?

MR. FUTTERMAN: Counsel, that question is highly confusing. You say is the mine serving him but he can't burn the coal?

MR. HEDLUND: No.

Do you understand the question?

Please read the question.

(The Reporter read the following question: "Is there some mine presently serving you that produces a type of coal which you cannot burn but which is being burned by another utility?")

Q Obviously some mines produce a variety of coals, some of which you can use, some of which you can't. Is that the case?

A In the first place, I am not fully aware of what other utilities some of these mines serve that serve us, and I am not aware of all the grades of coal that they may send from that mine. I don't think I can answer your question.

[59] MR. CAMPBELL: Do you want to go off the record here a minute?

(Discussion outside the record)

Q What I am driving at, Mr. Nicosin, or trying to—
MR. SIMS: Lead you into saying.

Q —are you aware that some No. 3 seam coal in Indiana is being burned by Wisconsin utilities?

A It's my understanding that a portion of the No. 3 is being sold to a Wisconsin utility and they're burning No. 3 by itself.

Q Why do they prefer that, if you know?

A No. 3 out of this particular mine is a higher BTU than No. 6 or No. 7, but some of the other characteristics

cause it to be a high fouling characteristic coal in certain types of boilers, and our unit 6 boiler will not handle the high fouling characteristics, so they choose to buy the higher BTU coal and take care of these other adverse factors because of the freight rate in hauling BTU's. It's natural you want to haul as many BTU's in a car for which you are paying, or in a ton. The more BTU's in the ton, the more economical [60] the price generally is.

MR. SIMS: Could I ask one question on voir dire?

Mr. Nicosin, are you testifying now from your memory or knowledge or what you previously told off the record?

THE WITNESS: I'm testifying from information that has been said to me by the coal company.

MR. SIMS: This is from your own knowledge, right?

THE WITNESS: Yes.

MR. SIMS: Okay.

Q Do you know why, Mr. Nicosin, the boilers at these Wisconsin utilities are able to burn only No. 3 seam coal?

A I am not sure they burn only that. They may be able to burn other coals, but they have seen fit to buy No. 3 coal for these boilers.

Q Mr. Nicosin, would you prefer for a new generating plant or an existing generating plant to be served by the full output of a given mine rather than half [61] of the output of three or four mines?

MR. SIMS: If in fact that is the only consideration he takes into account when he purchases his fuel?

MR. HEDLUND: All other things being equal.

A I didn't understand what he said. Try to phrase the question again, will you, please?

Q All other things being equal, would you prefer to be served by the full output of a single mine rather than the portion of an output of two or three mines?

MR. SIMS: Object as speculative and leading.

A I think that decision has to tie to that particular station. It's our thinking with Cayuga and in the future that you must have sufficient reserves to sort of guarantee your costs before you locate the plant. But I couldn't say that is true of every plant because some of our existing old plants are sharing mine outputs with other com-

panies. But from here on in we would like it that way.
[62] Q Is Public Service of Indiana in competition with other fuels?

A Yes.

MR. SIMS: For what markets, counsel?

MR. HEDLUND: For its markets.

A Yes.

Q Approximately what percent of your business would you consider to be competitive, that is competitive with other energy or other fuels?

MR. SIMS: Object. This is irrelevant to the issues in the case.

MR. CAMPBELL: Off the record.

MR. FUTTERMAN: I'm going to object to this. This is Mr. Nicosin's deposition, and I think that Mr. Nicosin should testify from his own knowledge and not from knowledge that you may have, sir.

MR. CAMPBELL: Well, we can start objecting here, too, then.

MR. HEDLUND: Are we on or off the record?

MR. FUTTERMAN: I made my objection [63] on the record.

MR. CAMPBELL: I'm just trying to expedite this thing. If we want to prove all this stuff, we can prove it, but I'm just trying to expedite it so we can get through here.

MR. SIMS: My only comment is that Mr. Hedlund is trying to prove it and not really you.

Q I will ask Mr. Nicosin what he knows of the extent to which the business of Public Service of Indiana is competitive with other fuels and energy sources.

A I know we are in definite competition with heating of houses, apartments, industries and so forth. We are in competition with industries that need that type of energy. I don't know what our percentage is, but I do know there is definitely serious competition.

Q Would it be over 50 percent of your business?

A I would guess so.

Q Have you in the past, let's say five years, acquired customers who were previously generating their own electricity by burning coal?

A Yes.

[64] Q Do you have an opinion as to whether or not the market for coal in self-generation units other than utilities has remained the same, has increased or has declined?

A It has declined.

Q In the past five years have you lost any customers to the self-generation of electricity by oil?

A You're asking did they quit us and start generating their own by the use of oil?

Q Either leave you or in the construction of a new plant put in their own self-generation with oil rather than buying the electricity from you.

A I don't think I can answer that. That isn't my line of the business. You'd have to ask the Marketing, because I am not aware, fully aware, of all the new customers that they have dealt with and what type of energy they started using.

Q Finally, Mr. Nicosin, I would like to read you a statement and ask whether or not you agree or disagree or don't know or can't answer, and you can make as full an answer as you wish, please.

The statement is as follows: "Coal consumers differ in their requirements for particular [65] types and quantities of coal, and transportation costs constitute a large portion of the delivered price of coal. Consequently, the nature and extent of competition in the coal industry must be determined with reference to the requirements and location of specific coal consuming facilities, vis-a-vis, the production capability and location of specific mines."

A Yes.

MR. SIMS: I am going to object to that. I don't think Mr. Nicosin is in a position to say what all coal consumers would need. He is only an electric utility consumer. For that reason he is not qualified to give an answer to that.

A I would say the coal consumers that I know, the answer is yes.

Q Do those include more than utilities?

A Yes.

MR. SIMS: Object as hearsay and move to strike the answer.

MR. HEDLUND: You may inquire.

.

[69] **Q** I think you testified earlier that your Cayuga plant was built with a letter of assurance from a coal company to provide coal for this plant for the duration of its life.

[70] **A** For 30 years, which is the greater part of its life.

Q But isn't it a fact that for the other coal generating stations that they are supplied by more than one coal producer?

A Yes.

Q Does the present presence of coal deposits and mines in Illinois and Kentucky serve as a restraint on the prices that Indiana coal producers can charge you?

MR. HEDLUND: May I have that question?

(The Reporter read back Q289)

MR. HEDLUND: I don't understand the question. I object to it as being not understandable.

Q Do you understand it?

A I'm not sure that I do. Again I think the answer would be no, in that transportation is such a big chunk of it, I don't see how a mine—

Q Assuming, though—

MR. HEDLUND: Wait a minute. Let him finish his answer.

[71] **A** I don't see how mines way over on the other side of Illinois puts any restraint on Indiana.

Q I didn't qualify it to say way across Illinois. I just said coal in Illinois or Kentucky.

A Well, coal in Illinois adjacent to the Indiana line, yes.

Q And coal in Kentucky adjacent to the Indiana line?

A Yes.

Q Don't you know for a fact that coal from Illinois does come into Indiana to serve coal consumers in the state?

MR. HEDLUND: Why don't you ask him if he knows that to be a fact, rather than arguing?

Q Do you know that to be a fact?

A I know it to be a fact that there is Illinois coal going into the generating stations in Northern Indiana Public Service Company.

Q Did you not also consider the presence of coal fields around the Danville area in Illinois as a possible future source of coal?

A Yes.

.

[74] **Q** Could you alter the contract in some manner to use coal in this area if you could get an offer?

A The contract is with Old Ben Coal Company, and if Old Ben Coal Company has any properties any place that they can supply a cheaper coal to Noblesville, we will take it under that contract. Otherwise, they have to let us out of that contract to buy from somebody else.

Q Assuming they would let you out of the contract, could you purchase coal in this area more cheaply?

A Not in the Universal area. We have investigated coal mines near Noblesville like the one at Chinook at Staunton. Again when you get into three railroads involved, we couldn't ship it any cheaper from Chinook to Noblesville than we could from the other mine. Now, these kind of things can happen, if you can find a cheaper source, then your contracting supply can buy it from the other guy and sell it to you, which could still help you come out with a lower delivery price. But we have not found a more economical source for Noblesville.

Q Do you know what the average overburden is that Peabody is mining the coal?

[75] **A** At Universal?

Q At Universal.

A The average I would guess is probably 90 feet.

Q When the Noblesville plant was built in 1950, was this considered uneconomical distributed strips?

A Yes, I would guess in 1950 fifty to sixty feet overburden was average.

Q I think you testified earlier that there were three different coal companies supplying your Gallagher plant.

A Yes.

Q Ayrshire, Peabody, Pittsburg & Midway?

A That's in 1967. There's a fourth in there now this year.

Q Who is the fourth one?

A Island Creek.

Q From what mine are they supplying?

A I believe it's called Hamilton mine in west Kentucky near Uniontown.

Q Why did you start purchasing from Island Creek?

A The other three suppliers in the year of 1968 had difficulty in fulfilling the shipping requirements. They were not able to give us the amount of coal [76] we needed. This caused us to look for an additional source to build up our storage.

.

[77] Q And then each time it is decided a new unit will be constructed, all grades of coal theoretically are in the running for the fuel requirements of that [78] boiler at that time?

A Generally speaking.

Q And you testified earlier, I think, that Peabody blended three different veins of coal in order to meet the requirements of a particular boiler, did you not?

A Yes.

Q Some coals can be blended by a particular coal producer to handle a boiler?

A Yes. And I might say if you go back a number of years, back when we had old chain grate boilers or different style boilers, they could handle a wider range of coals. But with the competition the type of boiler that we are now building has narrowed that margin down. In other words, they used to build a greater safety factor in the boiler.

Q Do you know from your own knowledge what are the major costs today a railroad incurs in shipping coal, in the total cost of shipment just where the prime costs are located?

A Prime costs are what they call terminal costs. That is the originating source and the terminating [79] source,

in that there is more time involved in assembling and making up a train and getting it moving, and there is more power required to get a loaded train in motion.

* * *

[81] Q Where do you own coal reserves?

A We own approximately 40,000,000 tons of deep mine coal in Vigo County and we own approximately twenty to twenty-five million tons in Knox County.

Q And you contract this coal out to be mined?

A No, it's held in reserve.

Q For what purpose?

A For the purpose of consumption if other coal is not available, and also for the purpose of maintaining competition.

Q Where is the location, again, in connection with the state?

A Vigo County; 40,000,000 tons in Vigo County. That's in the Terre Haute area, western part. Twenty to twenty-five million tons in Knox County in the Vincennes area.

Q Well, there is a possibility, though, that some time at a future date you would mine this coal to be used in a generating station?

A Yes, there is a possibility.

* * *

[85] MR. HEDLUND: In Chicago now we've got more ballparks than horsebacks.

THE WITNESS: That's for sure.

Q One last question. I think this is the last one.

Have you installed certain facilities in some of your generating stations to handle one air pollution pollutant, that is dust?

A In some stations; not in all. The Dresser station was built back in the twenties. They didn't know what you were talking about back then.

MR. SIMS: We have no further questions at this time.

REDIRECT EXAMINATION

QUESTIONS BY MR. HEDLUND:

Q Mr. Nicosin, why didn't you direct Combustion Engineering to design boilers for your Cayuga plant that could burn any grade of midwestern coal?

A To burn any grade?

Q Yes.

A It's an impossibility to design a boiler to burn any grade. You're talking about a range within an area of 50-mile radius. We came up with 22 kinds [86] of coal that we studied before the boiler was designed or the kind of coal was selected.

Q Then I misunderstood your previous testimony on cross-examination. I thought you said that a boiler can be designed to burn any midwestern coal.

MR. SIMS: No, excuse me. The question was could it be designed for any grade of coal, to burn any grade of coal.

Q Well, did you understand that question to be to mean any particular grade of midwestern coal?

A No, I didn't understand it that way. I thought he said in one boiler you could just put any kind of coal in this boiler you want and it will burn. My answer was no. You can design a boiler for any specific coal.

Q But you cannot design a boiler that will burn each and every kind of midwestern coal?

A It may burn it but not efficiently or not to maintain capacity.

. . . .

[88] MR. HEDLUND: No further questions.

MR. SIMS: We have no further questions but one proposition. We note in the deposition that the defendant has made reference to the Steam-Electric Plant Factors, and we would like to know if the standing stipulation applies to this document?

. . . .

[3]

EXCERPT FROM DEPOSITION OF
WILLIAM D. STIEHL, TAKEN MAY 20, 1969

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WILLIAM D. STIEHL,

called as a witness by the defendants herein, having been first duly sworn, was examined upon oral interrogatories, and he did thereupon depose and testify as follows:

DIRECT EXAMINATION

BY MR. KEMPF:

Q Please state your name and home address.

A William D. Stiehl, 406 McKinley Drive, Belleville, Illinois.

Q Are you appearing for your deposition this morning pursuant to subpoena, Mr. Stiehl?

A Yes, sir.

Q Mr. Stiehl, please state your current employment.

A Well, I'm an attorney practicing in Belleville and am President of Belle Valley Coal Company, Inc., also located at Belleville, Illinois.

Q How long have you been with the Belle Valley Coal Company?

A Since about 1956.

[4] Q How did you happen to join Belle Valley Coal Company?

A Well, it's a family business. My father became an invalid in 1956 and I became active in the management at the time and have been ever since.

Q How many mines does the Belle Valley Coal Company operate?

A At this time only one.

Q Where is that located?

A Belleville, Illinois.

Q Is that a strip mine or deep mine?

A It's a deep mine with a slope shaft.

Q At about what depth are you currently mining, Mr. Stiehl.

A At the foot of the slope it's 62½ feet, they tell me, with a 300-foot slope. The depth of the coal varies from this 62½ feet down to as deep as 125 feet. Presently we are in an area between 120 and 125 feet.

Q Mr. Stiehl, what seam or seams are you mining at Belle Valley?

A Number 6.

Q What is the approximate annual production of the Belle Valley Mine?

[5] A Well, it varies, but approximately 120,000 to 130,000 tons.

Q Do you have a washer and sizer at the Belle Valley?

A Yes, we do.

Q Are there any rail loading facilities at your mine?

A Yes, there are. We are on the Louisville & Nashville Railroad and have a spur.

Q Do you use the railroad in the transportation of coal mined at the Belle Valley?

A We do not do so now, nor have we done so for a good many years.

Q How does most of the coal move from the mine?

A By truck.

Q Does your company own the trucks which are used?

A We do not own any trucks used in the delivery of coal, and haven't owned any for that purpose for quite a few years.

Q What trucks are used to transport the coal, then?

A Trucks belonging to individual trucking contractors.

[6] Q By whom are they employed?

A In some cases they are trucks owned by individuals and that is their sole business. In other cases they are trucks owned by various trucking companies.

Q By my question, I meant who contracts for them to move the coal? Do you do that or does the buyer?

A Both. There are instances of each.

Q I see.

Mr. Stiehl, to what type of customers does Belle Valley sell the coal which it produces?

A Well, we sell both wholesale and retail. We sell to power companies, to federal installations, to city installations primarily in St. Louis. We sell to manufacturing

concerns, we sell to some retail users. By that I mean domestic users. That is a very small part of the business any more.

Q Who specifically are some of the customers to whom you sell?

A Well, Scott Air Force Base, which is located in Illinois, Granite City Army Engineering Depot in Granite City, Illinois; Illinois Power Company, a plant at Alton, Illinois; Union Electric at both Venice, Illinois and Ashley Street in Missouri. We sell to City Hospital in St. Louis. Those are, of course, all governmental [7] agencies or utilities, and in addition to that we sell to assorted manufacturers primarily in the St. Louis metropolitan area. If you want an enumeration—

Q No. I think that gives us a good representative cross section.

Where generally are these customers located to whom you sell?

A In the metropolitan St. Louis area.

Q Since you have been President of the Belle Valley Coal Company, has Belle Valley sold any coal to customers located in Indiana?

A I don't believe so, no. I don't recall ever selling any coal in Indiana.

Q Have you ever sold any coal, to your knowledge, in Western Kentucky?

A No.

Q What about such areas in Illinois as Peoria and Joppa?

A Peoria and where?

Q Peoria and Joppa.

A Not to my recollection, no.

Q For what purpose do the customers who purchase coal from you use the coal which they purchase?

A Well, it depends upon the customer. In the [8] case of utilities, for the generation of power. Some of the customers use it for heating, some for use in their manufacturing process.

Q Does Belle Valley sell any of the coal which it produces on a contract basis?

A Yes.

Q For how long a duration are these contracts?

A Nearly all of them are on a one-year basis. None of them are in excess of a year.

Q What methods do the federal government facilities which you described earlier use when they buy coal?

A They buy on an annual contract.

Q What is the procedure which they follow?

A Well, there is a written invitation for a bid. The invitation specifies the facility that will use the coal, specifies the size or type of coal, it specifies the minimum analysis required, and it specifies delivery, a delivery schedule.

Q Suppose someone were to submit a bid which offered coal which failed to meet one of the analysis specifications set forth in the invitation to bid. What would happen to that bid which was submitted?

MR. FUTTERMAN: I object to that question as [9] being a hypothetical.

MR. KEMPF: I know of no rule in federal procedure which prohibits the asking of hypotheticals such as the one I have posed, and I ask Mr. Stiehl to answer the question.

MR. FUTTERMAN: Are you trying to qualify Mr. Stiehl as an expert of some sort so you can ask him hypothetical questions?

MR. KEMPF: I am asking this hypothetical on the basis of the deposition evidence he has given thus far in his deposition this morning. I think on that basis he is qualified to answer this question.

MR. FUTTERMAN: I suggest to you, Counsel, that you can ask Mr. Stiehl what he knows or what has happened, but not speculative questions.

MR. KEMPF: I do not think this question is speculative, Counsel.

I will ask the reporter to re-read the last question for the benefit of the witness and myself.

Q (Read by the reporter.)

MR. KEMPF: You may answer.

MR. FUTTERMAN: I will maintain my objection.

[10] BY THE WITNESS:

A The Government would not accept the bid.

MR. FUTTERMAN: Counsel, I would like to point out at this point that this line of questions was directed to the government agent who was directly responsible for coal.

MR. KEMPF: Counsel, is this your deposition or Mr. Stiehl's? I think the prior deposition testimony will speak for itself, and if you wish to argue some point to the Judge or in a brief at some future date, I suggest you do it then and not during the course of this deposition.

MR. FUTTERMAN: I would like to complete my statement.

MR. KEMPF: Do you have an objection? If you have a statement, it is out of order.

MR. FUTTERMAN: In connection with my objection—

MR. KEMPF: In fact, the reason I was objecting to your statement was the fact that it was a statement and not an objection, and clearly so. Indeed, you so characterized it yourself.

MR. FUTTERMAN: I would like to object to this line of questioning on the ground that you have [11] already gone into this with the person most knowledgeable about this aspect of government coal buying, and you have continuously throughout the course of these depositions objected to questions that we have posed on the ground that they were better asked of people who were more knowledgeable about the subject matter. I would suggest to you that you have already had that opportunity in connection with purchases of coal by government installations.

MR. KEMPF: I think the record will demonstrate the witness' qualifications to answer this question, and I think the record from prior depositions will show the basis on which I have objected to certain questions. I would now like to continue the taking of this deposition.

BY MR. KEMPF:

Q Mr. Stiehl, could other customers also take account of size and quality characteristics in buying coal?

A Yes, to varying degrees.

MR. FUTTERMAN: I object. Would you explain what you mean by "quality"?

MR. KEMPF: The witness has already answered the question.

[12] BY MR. KEMPF:

Q Did you understand what I meant by the word "quality", Mr. Stiehl?

A I thought I did, yes.

Q Mr. Stiehl, does the Belle Valley Coal Company sell any coal on open account?

A Yes.

MR. FUTTERMAN: I would like to ask on voir dire what "open account" means.

BY MR. FUTTERMAN:

Q Mr. Stiehl, what do you understand the term "open account" to mean?

A My understanding of "open account," if I may put it this way, is when a customer either comes to our mine or calls us and requests coal of a certain size as opposed to a bid of coal for their purposes.

BY MR. KEMPF:

Q Mr. Stiehl, at the current rate of production, how many years of reserves does the Belle Valley Coal Company approximately have?

A Approximately eight to ten years.

Q Are you in the process of looking for other reserves to mine after the reserves at the Belle Valley Mine are exhausted?

[13] A I have to answer your question in this way: We are in the process of looking for other reserves, not necessarily to be mined after these are exhausted, but perhaps prior to the exhaustion of these.

Q Are these contiguous with the reserves at the existing mine location?

A Yes.

Q What about reserves in new fields?

A Well, we really have no interest in any reserves in any other fields. When our reserves are finally exhausted, I would not anticipate that we would continue in the coal mining business.

Q Mr. Stiehl, are you familiar with the St. Louis air pollution ordinance generally?

A Generally, yes.

Q Will this ordinance have any effect on your business once it is in operation?

A Yes, sir.

Q What will that be?

A Well, it will affect us in that we will have to make a determination of what course we are going to pursue. At this point it appears to me that we have three courses or three choices.

Very obviously, one is to look for different [14] markets, a market outside the area where this smoke abatement ordinance may be in effect.

Secondly, we can choose to try through technological improvement to reduce the amount of sulfur, to improve the quality of the coal so that it meets the St. Louis standards.

Our third alternative, or third choice, is to close down the mine. Whether or not we choose to follow the second route very obviously depends upon the amount of investment it will take to effect these necessary improvements. We are in the process of trying to make these determinations now, but we haven't reached any conclusion as yet.

Q I see.

Is your business faced with competition from other fuels, such as gas, oil and purchased electricity?

A Very definitely. They have had quite an effect on the coal industry.

Q Do you have any examples where it has had a specific effect on your business?

A I have as many examples as you have time, I suppose. For example, in this immediate area, we formerly supplied, we were the largest supplier, and by that I mean we had most of the business, to users such [15] as Belleville city facilities, City Hall, et cetera; the St.

Clair County facilities; the Court House, detention home, all of their various facilities; Belleville public schools, grade school, high school, and other schools in the area.

We also formerly, and of course this has been something that has dropped off over the course of years, supplied a great deal of coal to domestic users such as private homes, small manufacturing plants, things of this nature.

Q These facilities which you have mentioned, such as the City of Belleville facilities and St. Clair County facilities, what do they now use as fuel?

A Most of them use gas. My recollection is that almost all of these have gone to gas, but I may be wrong in one instance or two, but most of them have gone to gas.

MR. FUTTERMAN: On that basis I will move to strike those answers on the ground that you had best find out that information from the St. Clair County people in charge of procuring fuel for the St. Clair County facilities, and also for the local Belleville facilities.

[16] **BY MR. KEMPF:**

Q Mr. Stiehl, do you know of your own knowledge that most of these facilities have, in fact, shifted to gas?

A I certainly do, and if you want to go through them item by item, I think I can tell you in each instance. I was trying to give you a general answer before.

Q I do not think that will be necessary.

Has the fact that both United Electric and Freeman have been controlled by General Dynamics had any adverse effect on the Belle Valley Coal Company?

A None that I know of.

MR. FUTTERMAN: May I have the last question and answer read back, please?

(The record was thereupon read by the reporter as above recorded.)

BY MR. KEMPF:

Q How would you characterize the degree of competition at the present time in the coal industry?

A Well, it has been my experience, since I have been involved in the business, that it is a very competitive

business and remains so today. At least, it's very competitive for us. I don't know about for other people.

[17] Q Will there be any adverse effect on Belle Valley Coal Company or competition in the coal industry if General Dynamics is allowed to continue owning both Freeman and United Electric?

A I know of no adverse effect that it would have on our company. Obviously, I can't speak for the rest of the industry.

Q Would there be any benefit to Belle Valley Coal Company by forcing Freeman and United Electric to operate independently of each other?

A I know of none.

MR. KEMPF: I have no further questions at this time.

MR. FUTTERMAN: Would you read the last question and answer back, please.

(The record was thereupon read by the reporter as above recorded.)

MR. KEMPF: Off the record.

(There was discussion off the record, after which the taking of the deposition was resumed, as follows:)

(There was a short recess taken, after which the taking of the deposition was resumed, as follows:)

[18] MR. FUTTERMAN: Back on the record.

I have just a few questions, Mr. Stiehl.

CROSS EXAMINATION

BY MR. FUTTERMAN:

Q Isn't it a fact that on certain occasions Belle Valley Coal Company has bid against larger producers to supply coal to particular consumers?

A Yes, sir.

Q It is also a fact, is it not, that on some occasions Belle Valley has been successful on these bids and has been awarded contracts?

A Yes, sir.

Q Mr. Stiehl, since you have assumed the presidency of Belle Valley Coal Company, have Belle Valley's operations been profitable?

A Over the course of these roughly thirteen years, yes. There have been a few years when they were not, but on balance they have been.

Q Mr. Stiehl, you stated during your direct examination that none of Belle Valley's contracts were in excess of one year. Do you know who can enter into contracts for longer than one year, and by that I mean which coal producers?

[19] A Producers, or users?

Q Producers.

A Well, any producer including ourselves can, if we are able to meet the requirement. This is the limitation on our little mine is that we cannot, in many cases, meet the requirement of so many tons per year over so many years. If a producer is able to meet the user's requirement, then of course he can. Is your question directed to specific producers? Are you asking for specific companies?

Q Well, it was a general question.

A O.K. That's why I gave you a general answer. That is what I thought you wanted.

Q To make the question more specific, would you be able to name producers who could enter into contracts in excess of one year?

A Oh, I think I could. I think I'd be safe in naming any large coal mining company. For example, Peabody Coal Company. I have read various articles in the public press as well as in trade journals about long-term contracts they have had to supply coal, for example, to TVA and to other users. The same is true with many of the other large companies. For example, the companies that you are concerned with here are, I [20] am sure, able to supply on long-term bases as well as any other large company.

* * * *

[3]

EXCERPTS FROM DEPOSITION OF
THOMAS N. WARD, TAKEN MAY 28, 1969

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MR. HEDLUND: Who will be conducting the cross examination for the Government?

MR. SIMS: I will.

MR. HEDLUND: Mr. Ward, during your examination should I ask any questions or should Mr. Sims ask any questions that you do not understand, please indicate that and we will try to make our questions clearer. Sometimes we think we know what we are talking about, but it is not clear to the person who is being questioned.

Also, in the event that I interrupt you before—I will try not to do this—but if I interrupt you before you have finished your answer, please tell me that and give a complete answer.

THOMAS N. WARD

called as a witness by the defendants herein, having been first duly sworn by the Notary Public, was examined upon oral interrogatories, and he did thereupon depose and testified as follows:

DIRECT EXAMINATION

BY MR. HEDLUND:

Q Will you state your name and present business [4] affiliation.

A My name is Thomas N. Ward. I am Vice President, Secretary and Treasurer of Ohio Valley Electric Corporation and its subsidiary, Indiana-Kentucky Electric Corporation.

Q Are you present at this deposition pursuant to a subpoena that has been served upon you?

A Yes, I am.

Q Will you briefly state your educational and business background.

A I am a graduate of the University of Illinois, graduating in February of 1947 with a major in accounting, B.S. in business administration. Following graduation I was employed by the New York office of the public accounting firm of Arthur Andersen & Company. I worked for Arthur Andersen & Company primarily specializing in utility audits for approximately eight years. Following this period of time I was employed by my present employer. I am also a certified public accountant for the States of New Jersey and Ohio.

Q Could you briefly describe the responsibilities of your present position with Ohio Valley Corporation and Indiana-Kentucky Electric Company.

A My primary responsibilities in my present [5] position relate to managerial functions, and also I act as head of the Accounting Department, which includes the treasury function.

Q What responsibilities do you have with respect to the purchasing of coal by Indiana-Kentucky Electric and the consumption of that coal by the company?

A My responsibilities in connection with the purchase of coal are meager. Our coal purchasing has historically been handled principally by the President of the corporation. This was Mr. Philip Sporn, who was President until a little over a year ago.

However, I do have the responsibility for administration of the coal contracts in effecting payment for purchases thereunder.

Q For how long was Mr. Sporn president of Indiana-Kentucky?

A Mr. Sporn was president of the corporation from its beginning in 1952 until his retirement in 1967.

Q What other positions did Mr. Sporn hold, say, between 1960 and 1967 with respect to other companies, if you know?

A He was president of all operating companies of American Electric Power Corporation.

[6] Q Do you know whether American Electric Power Corporation is the largest investor-owned utility in the country in terms of kilowatt generation capacity?

A It is one of the largest. I do not know whether it is the largest.

Q Who took direct responsibility between 1952 to the present for negotiating the coal contracts entered into by Indiana-Kentucky?

A This function was primarily performed by Mr. Sporn.

Q He was during that period of time, as you have stated, the president?

A President, yes.

Q Would you briefly describe the history and background of Indiana-Kentucky and its parent Ohio Valley?

A Early in 1952 the government of the United States approached the utility companies in the Ohio River Valley area concerning the possibility of supplying a large block of power to a proposed gaseous diffusion plant to be operated by the United States Atomic Energy Commission. Following these initial inquiries, a group of ten companies, which comprise many of the utilities in the Ohio, Indiana, Pennsylvania [7] area, agreed that a separate corporation could be formed to supply the AEC their needs for power and energy.

At this time in our history the amount of power required by this proposed facility represented approximately one-third of the power consumed by the State of Ohio, within the State of Ohio. The Ohio Valley Electric Corporation and its subsidiary were formally organized in October, 1952.

Q Let me interrupt you. Is that "formally" or "formerly" organized?

A They got their charters.

Q That is what I mean. I'm sorry. Please continue, Mr. Ward.

A Following this organization, and incidentally there was a desire at this time for the generating stations to supply this block of power to be strategically located in different geographic areas. As you will recall, during this period of time we were in the Korean conflict, so obviously it was not desirable to locate one large station which would supply the electrical requirements of the gaseous diffusion plant in one central location. Accordingly, sites were selected for two generating stations, one generating [8] station known as the Kyger Creek Sta-

tion, located north of Gallipolis, Ohio. The other generating station was located in Madison, Indiana. Because of state laws, the station located in Madison, Indiana, it was found more feasible to have this in a separate corporation, Indiana-Kentucky Electric Corporation, organized in the State of Indiana.

Q Does that mean, then, that the facility in Madison, Indiana, is owned by Indiana-Kentucky Electric Company?

A Yes. The Clifty Creek generating station of Indiana-Kentucky Electric Corporation, of which the stock of Indiana-Kentucky Electric Corporation is 100 percent owned by Ohio Valley Electric Corporation, and further, Ohio Valley Electric Corporation purchases all of the generating capacity of the Clifty Creek Station.

Q Ohio Valley, then, sells this electricity to whom at the present time?

A Ohio Valley Electric Corporation sells the power and energy purchased from its subsidiary along with the energy produced from the Kyger Creek Station to principally sixteen customers. Initially, the prime customer was the Atomic Energy Commission. Since the mid-fifties, as we might know, the energy [9] requirements of the Atomic Energy Commission have been reduced. While their initial contract was for 1,800,000 kilowatts, their present contract capacity is 500,000 kilowatts. The power and energy not sold to the Atomic Energy Commission is, in turn, sold to fifteen sponsoring companies of Ohio Valley Electric Corporation. The sponsoring companies are either the stock holding companies of Ohio Valley Electric Corporation or subsidiaries thereof.

Q With respect to Clifty Creek, at the present time what percent of the power generated there is purchased by the AEC?

A I'm not so sure that we can actually give a percent of the power from Clifty Creek Station because this power all goes into an interconnected system. Clifty Creek Station is comprised of six 230-megawatt generating units. Kyger Creek Station has five generating units of the same size. So, the total capacity is eleven

units of 230 megawatts gross which would produce a net of approximately 215,000 per unit.

Q 215,000 megawatts?

A 215 megawatts.

Q I'm sorry.

Can you give a percentage of the power generated, [10] then, by both Kyger and Clifty Creek that goes to the AEC?

A At the present time?

Q Yes.

A It would be the relationship of 500 megawatts to a total capacity of 2,365 megawatts.

Q What is the generating capacity of the Clifty Creek Station?

A 1,290 megawatts net generation.

Q You have indicated that Clifty Creek is in Madison, Indiana. Could you give us a better geographical fix as to where that is?

A Madison, Indiana, is approximately midway on the Ohio River between Cincinnati, Ohio, and Louisville, Kentucky.

Q In what year did Clifty Creek reach its full generating capacity?

A Well, the station was completed on March 12, 1956. That was the date at which the last or sixth unit was placed in commercial operation.

Q Do you recall when construction of the plant began?

A Construction of the plant—I assume you're referring to the initial commencement of construction?

[11] Q Yes.

A The latter part of 1954. In other words, basically during the year of 1955 the generating station construction took place.

Q Approximately how many tons of coal per year does Clifty Creek consume?

A Clifty Creek Station itself consumes approximately four million tons of coal per year.

Q What facilities does Clifty Creek have for the delivery of coal to the plant?

A It was decided following the location of the plant that coal for the generating station would be delivered

by barge. Factually, we have no facilities for handling rail or truck delivery. Obviously, of course, a truck could drive onto the coal pile and dump the coal, but this is not the procedure under which we planned to receive coal. We estimate that the consumption of coal at Clifty Creek Station approximates 11,500 tons per day.

Q It would take a lot of trucks to provide that much each day, would it not?

A Yes, and the rail facilities—we have rail facilities within the plant site, primarily for the delivery and shipping out of major large pieces of [12] equipment, but no coal handling facilities such as car dumpers, this type of equipment.

Q Over the past two or three years, what was the approximate delivered cost per BTU of coal consumed at Clifty Creek?

MR. SIMS: From all mines, Counsel?

MR. HEDLUND: Yes. I am asking for the average cost experienced by the plant for all coal purchased.

BY THE WITNESS:

A All coal purchased at Clifty Creek Station has been delivered at an approximate cost of 19½ cents per million BTU.

Q When Clifty Creek was completed, do you know how it ranked in generating capacity in the United States?

A To the best of my knowledge, Clifty Creek was the then largest generating station in the United States.

Q To your knowledge has the Clifty Creek Station ever consumed coal produced in the State of Illinois?

A To my knowledge they have not.

Q Do you know why that is?

[13] A It would be my belief that coal was not purchased from Illinois because of the shipping distance that would be required to acquire such coal and deliver it to Madison, Indiana. It would be my thought that the barging rate would be significant enough to preclude Indiana-Kentucky Electric Corporation from purchasing.

Q What new coal contracts have been entered into by Indiana-Kentucky for the Clifty Creek Station?

A The initial coal contracts for the generating station were contracts of approximately fifteen years' duration. We are now approaching the termination date of the original contracts.

Prior to Mr. Sporn's retirement, he felt that Ohio Valley Electric Corporation and its subsidiary Indiana-Kentucky Electric Corporation were entering what one might call their second phase of operation. It was his desire to firm up the coal requirements for the next approximately 15-year period prior to his retirement. During the latter part of 1968 substantial contracts were entered into with one of our present suppliers, Ayrshire Collieries Corporation, and a significant contract with a new supplier, Island Creek Coal Company. These contracts recently entered into will have also approximately a 15-year term.

[14] Following the expiration of these contracts which occurs in the early 1980's, it will then be necessary to ascertain the expected future life of the generating stations to determine what coal requirements will be for the then remaining period of expected generation.

Q What is the present expected life of this generating station?

A Under our contractual terms with the Atomic Energy Commission, the cost of plant facilities are being written off over a period of 25 years from March 12, 1956. Therefore, our plant capacity will be fully depreciated on the corporation's books by March 12, 1981. The present day expected life of generating capacity, as published in the Internal Revenue Service Guidelines, as I recall, is 28 years.

Q What present plans do either Ohio Valley or Indiana-Kentucky have for expanding or replacing the generating capacity of the Clifty Creek station?

A We have no present plans for expanding at Clifty Creek Station or at the Kyger Creek Station of the parent company. The stations were built for a specific purpose of providing energy to the Atomic Energy Commission, and these contracts were not [15] negotiated with any growth potential in the corporations.

Q Do Ohio Valley or Indiana-Kentucky have any pres-

ent plans to replace either Clifty Creek or Kyger at the end of their useful lives?

A We have no plans for any such replacements. As a matter of fact, this also is governed somewhat by our contract with the Atomic Energy Commission, wherein any replacements of property having a cost in excess of \$100,000 must be formally approved by the AEC before any such replacement takes place. This, obviously, is a control feature of the Government, because in our contractual arrangements with them, they reimburse the corporation for the cost of replacements.

Q With respect to the new contract of Ayrshire, what is the length of that contract and the approximate tonnage that will be shipped each year.

A The contract with Ayrshire Collieries is approximately a fifteen-year contract, providing for 800,000 tons per year, plus or minus fifteen percent. The reason for the plus or minus fifteen percent relates to a flexibility factor which we feel we must have in order to effectively regulate the need for fuel as related to the requirements of either AEC or the sponsoring companies.

[16] Q From what mine or mines of Ayrshire will this tonnage be shipped?

A From Ayrshire the tonnage will come from the Wright Mine, with a loading point at Yankeetown, Indiana.

Q How will that coal be transported from Yankeetown to Clifty Creek?

A By barge.

Q With respect to the contract with Island Creek, what is the duration of that contract?

A The contract with Island Creek is also for an approximate term of fifteen years with an option available to the corporation of extending it for another five years. This coal is being purchased from a new mine known as the Hamilton No. 1 Mine located near Uniontown, Kentucky. This coal is deep mine coal coming from the West Kentucky No. 9 seam.

Q Approximately how many tons of coal will be shipped each year out of that mine by Island Creek to Clifty Creek?

MR. HEDLUND: Perhaps I had better restate that question.

BY MR. HEDLUND:

Q Approximately how many tons per year does your [17] contract with Island Creek call for?

A Our contract with Island Creek calls for two and a quarter to two and a half million tons per year.

Q If you know, was this mine opened by Island Creek for the purpose of complying with this contract?

A To my knowledge this mine was opened to supply Indiana-Kentucky Electric Corporation.

Q If you know, will the shipments out of this mine to Clifty Creek comprise virtually the total production of that mine?

A I can't answer this question.

Q Under these two contracts which you have referred to in your existing contracts, are you able to predict for the ensuing life of the plant what your approximate delivered cost per BTU, average delivered cost per BTU, will be at Clifty Creek in comparison to prior years?

A We would hope that the delivered cost will be approximately the same as that I have previously stated, around 19½ cents. Obviously, we have to realize that negotiations by the United Mine Workers and others will have an effect on this cost. Our contracts are subject to escalation from the base contract prices for such items as miners' wage increases.

[18] We did realize, in negotiating a contract with Island Creek, however, that it would not be subject to the costs of some other mines in connection with the strip mining laws of various states, where there are factors in the contracts providing for reimbursements for cost in connection with placing stripped mine areas back into a satisfactory condition.

Q Could you give us, sir, please, the details with respect to your testing, if you did this, of the Island Creek coal that is to be supplied under their contract.

A I believe it would be appropriate to mention here the testing we have done from the beginning at both generating stations in connection with the use of coal.

At the time we negotiated for the purchase of our boilers, of which there were eleven to be purchased, there were several generating units of the same size that we planned to install. These were located on the American Electric Power System. The generating units that I have previously mentioned were the then largest generating units available. This is the 215-megawatts net generation. Of course, in our present day technology these are now not the largest, [19] but at that time they were.

What we did was to actually send coal to the similar operating facilities and have the coal that we planned to purchase burned on a test basis. For example, in connection with the recent contract entered into with Island Creek, we did, in fact, during 1956, as you will note from the purchases from Island Creek during that period—

Q I am sorry. Did you mean to say 1956?

A '66. I'm sorry. 1966.

We purchased coal from Island Creek, which was primarily used for test purposes. This coal was not from the Hamilton Mine, which was going to supply us under the long term contract, but was from an existing mine, which was producing No. 9 seam coal. This was delivered to our Clifty Creek station and burned. The characteristics were satisfactory, that we could, in fact, burn it.

It is interesting to note, however, that we have run into a circumstance recently which has prompted us to reevaluate our test procedures.

Q Could you explain, please.

A On occasion recently because of the inability, because of flood conditions on the river or in the mines, [20] we received a substantial amount of coal from Island Creek. This was placed into our boilers and we encountered a severe fouling characteristic in the superheater section of the boilers, a characteristic we have never experienced. As I say, we tested this coal, and on approximately a 50-50 basis this coal burned very, very well.

Q I am sorry. What do you mean by "on a 50-50 basis"?

A Mixing the Island Creek coal with other coal.

The people at the generating station tell me that it somewhat has a characteristic like molasses, but when it is mixed it burns satisfactorily. We are now testing to determine what we have to do to adequately burn this coal. We know we can do it on a 50-50 basis. This we have proven.

We are making some modifications in our boilers to provide additional air capacity. In other words, we may not be getting adequate combustion in boilers. We have found, really, there is quite a bit of difference in coal.

I recall another experience at our Ohio plant where we bought some coal from a mine north of Wheeling, West Virginia, for the specific purpose of testing our [21] scales. All of our scales—the scales at our generating station are used as the basis for determining the tons purchased from the various suppliers, so it is absolutely necessary for us to go to as great an extent as possible to test these scales. We bought some test coal from this mine that I was mentioning, burned it in our boiler at Kyger Creek Station, and its characteristics were such that we had to take the unit off the line to get the slag to flow out of the bottom of the boiler. All of the boilers at both Ohio Valley Electric and Indiana-Kentucky Electric are what are term “wet bottom” boilers. In other words, the slag from combustion actually flows out the bottom of the boiler into the ash hopper.

Q You mentioned the fact that this Island Creek coal on a 100 percent basis caused fouling. Why is fouling a problem?

A Fouling is a problem because you don't get the correct exchange in your various superheater and reheater sections of the boiler, so you are losing efficiency.

Q Can it reach a stage where it is so severe that it requires you to shut down the unit altogether?

A Yes, it does.

[22] Q We may have covered this, but I want to make sure it is clear. What plans, if any, are you making that will permit you to burn this coal from Island Creek on a 100 percent basis?

A As I mentioned, we are installing what are termed wall blowers, which I have been told have the effect of

increasing the air capacity in the primary furnace. This is a timely test project which we do not have the results of at the present time.

Q Do you know whether this will be all you will need to do to burn the coal?

A No, we do not.

Q In the equipment at Clifty Creek, would it be possible for you to burn low sulfur coal?

A No.

Q Could you explain that, please?

A As I understand, the amount of sulfur in coal determines fusion temperature. The boilers at both of the generating stations of the companies I represent were designed to burn low-cost coal with a sulfur content of approximately five percent. As I understand—

Q Is that a maximum?

A It is in the area of five percent.

Q I see.

[23] A (Continuing) As I understand, low sulfur coal has a much higher fusion temperature which, if burned in our boilers, would have the effect of consuming the boiler tubes themselves.

Q Would it be feasible to convert or redesign the boilers at Clifty Creek to burn low sulfur coal?

MR. SIMS: Counsel, I do not think you have established a proper foundation for asking Mr. Ward this type of question. It would seem to me that this is an engineering consideration. It has been established that he is a certified public accountant.

MR. HEDLUND: I am asking for the extent of his knowledge, Mr. Sims.

BY MR. HEDLUND:

Q Would you like to have the question repeated?

A No.

We have had occasion to participate in discussion sessions with various state agencies in connection with the problem that utility companies face regarding emission into the air. In our studies we have found that to burn low sulfur coal it would be necessary for us to completely replace our boilers. In other words, we could not burn low sulfur coal in the type of boilers that we have.

[24] Q I would like to direct your attention to Form 175 submitted by Indiana-Kentucky under your signature in response to a subpoena issued by the Court in this case, and specifically to the answer to Question 9. Your answer is as follows:

"Not applicable."

I wonder if you could explain what you meant by that or what your intention was. I can show you my copy if that would be helpful.

A I have it. The reason that we stated "Not applicable" to Question No. 9 of—Form 175?

Q That is correct.

A (Continuing) —was that we cannot burn coal with characteristics significantly different than those specified in answer to Question 8.

Q Would it be feasible to redesign or modify your boilers to burn coal with characteristics significantly different than that indicated in answer to Question 8?

A Well, as I've mentioned, I've been informed that to burn low sulfur coal would require complete replacement of boilers. If economically our society can stand the cost of such replacement and we have the need for electric energy, obviously, of course, this would be feasible, but under present day thinking, it [25] would not be too practical, because, as you probably know, generating stations are designed for specific types of equipment. There is a certain amount of space allocated to the boilers themselves. New boilers may take greater space than that available or they could take less space.

Q I would like to direct your attention to Form 150 submitted under your signature by Indiana-Kentucky in response to the subpoena previously referred to, and specifically to Form 150 which reflects shipments in 1967 by the Uniontown Mine of Island Creek to the Clifty Creek Station of Indiana-Kentucky,—

MR. SIMS: Could you wait one second, Counsel, while we locate that?

MR. HEDLUND: I would like to finish describing the document.

BY MR. HEDLUND:

Q (Continuing) —the original of which is numbered at the bottom as 449.

MR. HEDLUND: Off the record.

(There was discussion off the record, after which the taking of the deposition was resumed, as follows:)

MR. HEDLUND: Back on the record.

[26] BY MR. HEDLUND:

Q Mr. Ward, I direct your attention to Column C on the inner page of the document referred to where appears the figure 40.7, and ask you whether that figure is correct.

A That figure is not correct.

Q What should it be?

A The figure should be 4.07.

Q Mr. Ward, I will ask you to assume that the mines of the United Electric Coal Companies are located near Peoria, Illinois, that is, three of them are near Peoria, Illinois, and one is in Perry County, Illinois, and ask you to assume that the mines of Freeman Coal Mining Corporation are located near Springfield, Illinois, and three mines in the southeastern portion of the state in Williamson, Franklin and Jefferson counties, and to take into account your knowledge and experience with respect to coal purchasing and handling, has the common ownership of United Electric and Freeman had any adverse effect upon Indiana-Kentucky Electric?

MR. SIMS: I am going to have to object to this. He stated that his knowledge was meager in this area, and I do not see where it would really serve the purpose of the case to have his opinion [27] on this matter.

MR. HEDLUND: We will argue that in our briefs, Counsel.

BY MR. HEDLUND:

Q You may answer.

A Neither Ohio Valley nor Indiana-Kentucky Electric Corporation have ever purchased any Illinois coal. Neither do we contemplate purchasing any Illinois coal. I

would doubt that the mines in Indiana could compete—pardon me—in Illinois could compete with those in Indiana and West Kentucky, which are closer to our coal consuming facility, and I do factually know that the barging rate is a function of distance.

Q In light of that, then, has there been or will there be any adverse effect on Indiana-Kentucky?

A Not to my knowledge.

Q Can you conceive of any possible benefit to Indiana-Kentucky were the Court in this action to require the divestiture of the United Electric Coal Companies and to establish them as an independent coal producer?

A As I mentioned, I can see no effect on Indiana-Kentucky Electric Corporation. There obviously may be some effect in the coal industry.

However, we have to recognize in our present [28] day period that the coal itself is competitive with other fuels—pardon me—is in competition with other fuels. What I am referring to now is nuclear energy. When we started to think about the use of nuclear energy for the generation of electric energy, the differential at that time was a relationship of 35 cents a million BTU, coal cost. Nuclear stations were obviously, therefore, considered and located in areas where coal cost or fuel cost was high. This cost comparison of nuclear energy with other fuels has been lowered through technological advances, and as I understand, under some of the facilities now under construction, nuclear capacity is competitive at something in the area of 25 cents per million BTU coal. It is expected that this will improve as the various different methods of the use of nuclear energy are developed.

Another factor in this connection which I think we can't lose sight of is the current interest in controlling emission of various gasses and particles into the air. Consumption of coal obviously emits certain gasses, whereas in connection with the use of nuclear energy the emission is one of the thermal nature.

MR. SIMS: I will move to strike that part of his testimony which is not responsive to the [29] question.

MR. HEDLUND: I think it is clearly responsive, Counsel, and I will ask to have the question again.

MR. SIMS: Will you read back the question, please.

MR. HEDLUND: Will you read it back and then I will repeat it.

Why do you want it read back, Counsel?

MR. SIMS: You said it was clearly responsive.

MR. HEDLUND: We have no one here to rule on that, so what function will it serve by reading it back? You made your objection.

MR. SIMS: You said you were going to ask it again.

MR. HEDLUND: I am going to ask it again now.

MR. SIMS: Would you read the question back, please.

Q (Read by the reporter.)

MR. HEDLUND: I will ask that question again, if I may, and keeping in mind your prior answer.

MR. SIMS: I am going to have to object. You did not lay the proper foundation for asking Mr. Ward things of this sort.

[30] BY MR. HEDLUND:

Q Again, Mr. Ward, do you see any possible potential benefit to Indiana-Kentucky were the Court to require divestiture of United Electric as an independent company?

A I can see no benefit.

Q Of what importance, if any, to a utility the size of Ohio Valley and Indiana-Kentucky would be the acquisition by a coal producer of another company producing seven million tons?

MR. SIMS: I will have to object. That is speculative.

MR. HEDLUND: Again, asking for your opinion.

THE WITNESS: Would you repeat the question.

MR. HEDLUND: Would you please read back the question.

Q (Read by the reporter.)

BY THE WITNESS:

A In my opinion this would not be of any great importance because we have found that generally in the areas that we consume coal it is advantageous, obviously, not to be taking the entire production from a single company, nor a substantial part thereof.

* * *

[38] BY MR. SIMS:

Q Mr. Ward, does the fact of constant demand make your company more conducive to long-term contracts?

MR. HEDLUND: More conducive than what? I don't understand your question, Counsel.

BY MR. SIMS:

Q Do you understand it, Mr. Ward?

A I think I can answer the question. Let me try.

Q Fine.

A I'm not so sure that the length of term of our contracts, for example, with the Atomic Energy Commission or the sponsoring companies, really recognizes or anticipates whether we should or should not go into long term versus short term contracts. It is my opinion that there are some distinct advantages to long term contracts. One, it assures supply when you are dealing with reputable mining companies. Two, it also enables mining companies, then, to purchase equipment for mining operations, and in some cases even pledge the receivable portion of the contract they [39] have on a long term basis to enable the finance of this equipment.

In other words, there are basically two sides to this. Obviously, if we were going to be in business for five years, we wouldn't enter into 15 year coal contracts, and if we didn't have a source to sell our power two years from now, we certainly would not want five year contracts, so the length of the contract is important, and also the factor of the price we are able to obtain from coal companies, in my opinion, would be somewhat figured on the basis of whether they had a long term or short term contract because of the amount of coal per consumer.

Q If you know, don't most electrical utilities have a peaking season where their demand is greater than in other parts of the year?

A Historically this has been so. As a matter of fact, historically electric utility peaks occur during the winter months. However, recently this has factually changed, whereas now the peaks are occurring in the summer months.

. . . .

[47] Q Isn't it also true that for mines supplying your plant in 1967, they were supplying coal with sulfur ranging from about three to five percent?

A Yes, yes.

Q What would be the purpose of stating in a contract that a coal supplier has to furnish coal with an ash of, let's say 8.5 percent, a moisture of, let's say, 10 percent, if, in fact, your equipment can use coals with a higher ash or lower ash or higher or lower moisture content?

MR. HEDLUND: May I have that question back, please.

Q (Read by the reporter.)

MR. HEDLUND: All right.

BY THE WITNESS:

A The reason for these specifications in the contract provisions are to enable a corporation to have the option of either accepting or rejecting coal which varies from these characteristics. We obviously don't want to contract for coal if we're going to end up handling ashes to an excessive degree. In other words, this gives you options to accept or reject deliveries.

* * *

[48] Q If it were the same price, is that right?

[49] A Yes, yes.

Q If the inferior coal was at a much lower price and you could burn this coal with a minimum problem in the boiler, would it be a possibility to buy this coal?

A It would be, yes.

Q Have you ever used gas in your Clifty Creek station?

A We have never used gas.

Q Have you ever had any discussions with gas companies about the price of gas?

A No, we have not.

Q Why is this?

A Because, obviously, I cannot see how gas could be competitive with barge-delivered coal.

Q Could you be more specific in terms of price between the two fuels?

MR. HEDLUND: Are you speaking now from Clifty Creek?

MR. SIMS: Clifty Creek.

MR. HEDLUND: You are speaking of the comparison between gas that might be available at Clifty Creek and barge-delivered coal?

MR. SIMS: That is correct.

[50] BY THE WITNESS:

A Obviously, if natural gas were available at Clifty Creek Station at 20 cents a million BTU's, first of all, we could not burn it. We don't have the burner capacity, facilities, to burn it, so really, no, we have never investigated purchasing gas.

BY MR. SIMS:

Q To your knowledge has natural gas been available at any time since your plant started up, since 1956?

MR. HEDLUND: At Clifty Creek?

MR. SIMS: At Clifty Creek.

MR. HEDLUND: Available physically or at cost?

MR. SIMS: First, let's say available physically.

BY THE WITNESS:

A To my knowledge, gas in quantities that we would consume at Clifty Creek Station would not be available without additional pipeline capacity.

BY MR. SIMS:

Q Have you ever considered oil as your prime fuel in this facility, Clifty Creek?

A We do use oil at Clifty Creek Station, primarily for start-up and also during low load [51] conditions for maintaining the fire. This is the only use of oil. We do not plan to use oil at Clifty Creek Station for normal day to day generation.

Q Has your company ever considered constructing a nuclear power plant?

A We have studied the possibilities of constructing a nuclear station, yes. This was a very brief study made to determine what the costs might be should the Atomic

Energy Commission at some future date need capacity greater than that we are able to supply from our two generating stations. However, this has been three or four years ago and there have been no recent studies.

Q What conclusions did you come to, if any, as to the cost comparison between coal and a nuclear plant?

MR. HEDLUND: Are you speaking now of operating costs or construction costs?

MR. SIMS: Total costs.

BY THE WITNESS:

A The total cost at the time was quite interesting, really, but there was one factor, which you don't know whether you are using the right components or not, and that is what is your equipment going to cost. It [52] is very difficult to get firm prices.

. . . .

[55] Q Basically, the delivered coal price is broken down into the price of the coal at the mine and the transportation cost, is that not right?

A We are interested in pricing our coal as delivered in cents per million BTU. Does this answer your question?

Q Of course, you are interested in the total delivered price, but this total delivered price is generally broken down into a price f.o.b. mine—

A Yes.

Q —and the transportation cost?

A Yes.

Q The cost a particular coal company would incur producing coal at its mine would have nothing whatsoever to do with the transportation cost, would it?

A It should not.

Q So, just by knowing the barge rates, the transportation rates, you could not tell whether a coal company could supply you coal competitively unless you knew what they were—

A Selling coal for.

. . . .

[59] BY MR. HEDLUND:

Q Which, I gather, Indiana-Kentucky does not?

A Yes. We don't have hundreds of thousands of customers. We have 16 customers.

Q You stated that people were hoping for a development of the fast breeder nuclear reactor. Can you tell me why this is being hoped for?

A The theory under the fast breeder is that it produces more than it consumes. Obviously, this would produce low cost fuel.

Q Low cost fuel or low cost electricity?

A Low cost electricity, because the fusion of your atomic matter would produce more than consume.

Q In light of your present contracts and the long-term contracts that you have recently entered into, have you now contracted for all of your long-term contract coal for your facility at Clifty Creek through its expected life?

A We've contracted for what I mentioned previously, what we consider our second phase, which is through the early 1980's. As to what our expected life would be beyond 1980, it would be [60] entirely dependent on the conditions of the generating capacity of the United States at that time.

MR. HEDLUND: I have no further questions.

RECROSS EXAMINATION

BY MR. SIMS:

Q Mr. Ward, do you have any knowledge as to when the breeder reactor will be developed?

A I have none whatsoever.

MR. SIMS: We have no further questions.

MR. HEDLUND: Mr. Ward, you have the right to ask for an opportunity to read the transcript of your deposition before signing it, or you can waive your signature. Reading it would give you an opportunity to make such corrections as are necessary in terms of the

accuracy of the transcription. Which would you prefer to do?

THE WITNESS: What is normally done in this respect?

MR. HEDLUND: Well, there is no normal practice. In most of the depositions we have taken so far, the witnesses have asked for an opportunity to read the transcript.

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[3]

EXCERPTS FROM DEPOSITION OF
REUBEN A. REDARD, TAKEN JUNE 10, 1969

* * *

MR. HEDLUND: Mr. Redard, during the course of my questioning if I ask you a question that you do not understand or if Mr. Futterman asks you a question that you do not understand, please do not hesitate to ask us for clarification. Sometimes I think I know what I am talking about but it is not clear to the witness.

Also, should I interrupt you before you have completed your answer, please tell me that I have done that and then give your full answer. I will not do this intentionally, but sometimes in the process of looking toward the next question I may do that.

RUBEN A. REDARD,

called as a witness by the defendants herein, having been first duly sworn by the Notary Public, was examined upon oral interrogatories, and he did thereupon depose and testify as follows:

DIRECT EXAMINATION

BY MR. HEDLUND:

Q Would you please state your name and your present occupation.

[4] A Ruben A. Redard, Vice President in charge of purchases for Keystone Steel and Wire, Division of Keystone Consolidated Industries.

Q Are you a resident of Peoria?

A Yes.

Q How long have you lived here?

A Thirty-two years.

Q Would you please, sir, briefly describe your educational and business background.

A I was educated at the University of Illinois and majored in business administration. My first employment was with the War Department as a surveyor on the Illinois River, after which I went to work for Keystone, and my service with Keystone was only interrupted for three years during World War II, at which time I served in the Army, and I have been here ever since.

Q What positions have you held with Keystone, again briefly, if you will, please.

A I was in the Sales Department as Assistant Sales Director, later a sales analyst, later Assistant Manager of the Priorities Department, and then after the war I was a buyer and Assistant Purchasing Agent, Purchasing Agent and now Vice President.

[5] Q Would you briefly describe the functions you performed in your position as Vice President in charge of Purchasing?

A Yes. I'm responsible for all buying at Peoria and also Chicago Heights.

Q Would you please give me your degree of involvement while you have been in purchasing for Keystone with coal purchasing for your facility in Peoria.

A I was indirectly involved in coal purchasing up to 1962. My immediate superior became deceased at that time, and coal was one of the commodities for which I assumed full responsibility from '62 on to the time we sold our power plant approximately a year ago.

Q Will you please briefly describe the business of Keystone Steel and Wire.

A We're a primary steel producer and we fabricate numerous steel products for a number of industries.

Q Until your power plant in Peoria was sold, for what purposes did you buy coal for that plant?

A Will you restate that?

Q Prior to your selling the power plant at your facility in Peoria, why did you buy coal?

A To service our power plant only.

Q Were you generating your own electricity?

[6] A Yes.

Q With coal?

A Yes.

Q Were you producing steam?

A Yes, as a by-product.

Q Was there any other use of the heat generated by the coal?

A We used steam for heating purposes in the plant. The primary purpose of the plant, of course, was to generate electricity.

Q In the year 1967 do you recall approximately the total amount of coal that was purchased by Keystone for its Peoria facility?

A Approximately 175,000 net tons.

Q How did this compare with, say, the preceding five-year period?

A There was some variation, but I would say from 150,000 to 175,000 would describe our usage, annual usage.

Q In 1967 do you know how Keystone ranked in the general Peoria area among non-utility buyers of coal in terms of the total coal purchased?

A Number 1.

Q As I understand it, your power plant has been [7] sold, is that correct?

A Yes, that's correct.

Q So, you are no longer purchasing coal for that plant or for any of your facilities or for your facility generally here in Peoria, is that correct?

A That's correct.

Q To whom did you sell the power plant?

A Central Illinois Light Company.

Q When did they take over operation of the plant?

A April 1, 1968.

Q Would you please give us the reasons why your power plant was sold to C.I.L.C.O.?

A We had an offer we couldn't turn down.

Q Could you go into that in a little bit more detail in terms of your reasons why you were interested in selling the plant?

A Yes.

MR. FUTTERMAN: Excuse me just a minute. I do not think that you have correctly characterized, and I do not think there has been any testimony as to other reasons why the plant has been sold. I think if you want to get that, you should ask that. On that basis I will object to that question.

[8] MR. HEDLUND: I have asked the witness to expand on his answer if he chooses to do so. I did not intend to characterize his testimony one way or the other.

BY THE WITNESS:

A About the time we had the offer from C.I.L.C.O., or perhaps I should say a short time preceding the offer, we had made a decision to build two electric furnaces to replace our five open hearths. We knew that our electrical energy requirements would be doubled upon completion of the two electric furnaces, and we would have to buy this power from a local utility. They consequently offered us a very attractive rate, described in Rate 33.

As a part of their offer they suggested we might be privileged to use Rate 33 for the balance of our power requirements throughout the plant. We were also aware of the requirements made by the State of Illinois that we eliminate air pollution. We were faced with an expenditure of approximately one million dollars.

We also were aware of the fact that some of these machines in this plant were built in 1918. We had no reserve capacity. This was part of the offer, [9] that we would be provided with adequate backup at all times. These add up to the acceptance of the offer.

BY MR. HEDLUND:

Q Since C.I.L.C.O. took over operation of your plant, how has the situation worked out, that is, your purchasing all of your power from C.I.L.C.O.?

A Very satisfactorily.

Q You mentioned the availability from C.I.L.C.O. of backup power. Why was that important?

A We were using the capacity limit of power generation from our plant. We had no provisions for backup should an accident occur or a machine be shut down, either by an act of God or through failure of equipment. The C.I.L.C.O. proposition did provide for backup power from other plants. We would have had to have spent a considerable sum of money for new equipment in order to do the same—to obtain the same results on our own.

Q Is the equipment at the power plant designed to burn coal from a particular area or having particular chemical properties?

MR. FUTTERMAN: I object to that question as leading.

[10] MR. HEDLUND: Mr. Futterman, would you care to enlighten me, with your experience, as to how to ask that question without being leading?

MR. FUTTERMAN: I think you have had enough experience to know how to ask a question.

MR. HEDLUND: I think your objection is patently ridiculous.

MR. FUTTERMAN: The Judge will decide that.

BY MR. HEDLUND:

Q Would you answer the question, Mr. Redard, if you understand it?

MR. SCHNEIDER: Go ahead and answer.

BY THE WITNESS:

A Our equipment was designed specifically to handle No. 5 and No. 6 seam coal from this area, principally Fulton County.

BY MR. HEDLUND:

Q Prior to the construction of these boilers, were samples taken of the Fulton County coal?

A Yes.

Q Were those turned over, or at least the results of that sampling, turned over to the boiler manufacturers?

A Yes.

[11] Q To your knowledge has the power plant burned coal from mines located in areas other than the immediate vicinity of Peoria?

A No.

Q Did any coal producer in the past propose to you that you purchase coal from a different seam in a different area?

A Yes.

Q Who was that?

A Republic Coal.

Q What was their proposal?

A After their reserves ran out in the Peoria area, approximately two years before we sold the plant, they suggested providing No. 3 seam coal from the Virginia, Illinois mine. However, we did not see fit to do it.

Q Why was that?

A Our equipment was designed for No. 5 and No. 6, and we would have had to spend a considerable amount of money to provide equipment to handle No. 3. We didn't see any reason to do this as long as other coal companies could provide the coal our equipment was designed for.

Q In general, Mr. Redard, why have you never [12] purchased coal from mines located outside or beyond the general vicinity of Peoria?

A It would have cost more. We purchased the most economical coal we could obtain. Hence, the material adjacent to Peoria was less expensive.

MR. HEDLUND: I would like the reporter to mark as Redard Deposition Exhibit 1 a letter of April 26, 1968, from Mr. R. A. Redard, Vice President, Purchasing, to the Department of Justice. Having done so, would you please hand it to the witness.

(The document was thereupon marked Redard Deposition Exhibit 1 for identification, 6-10-69.)

MR. HEDLUND: Will the Government agree to the application of the standing stipulation to this letter?

MR. FUTTERMAN: I would like to ask Mr. Redard a few questions about this letter before I do so. I believe it will apply, but I will wait until my cross examination. If you would ask me that question at the termination of my cross examination, I think we can have it apply.

[13] BY MR. HEDLUND:

Q Mr. Redard, is this a copy of a letter that you wrote to the Department of Justice on April 26, 1968?

A Yes.

Q To your best knowledge and belief, are the facts set forth therein true and accurate?

A Yes.

Q Do you know whether the Freeman Coal Mining Corporation in its own name or under its own name operates any mines within the general vicinity of Peoria?

A I don't know of any.

Q You do not know of any?

A No.

Q In your opinion, has the common ownership of The United Electric Coal Companies and Freeman Coal Mining Corporation had any adverse effect in the past on the coal purchasing of Keystone Steel and Wire?

A No.

Q Is it fair to state that now that you are out of the coal purchasing business that this common ownership would have no effect upon Keystone in the future?

[14] A Yes.

Q As a resident of Peoria, Mr. Redard, according to your knowledge, what remains of the residential heating market for coal in this area?

A Very little, if any.

MR. HEDLUND: You may inquire.

MR. FUTTERMAN: Thank you, Counsel.

Off the record.

(There was discussion off the record, after which the taking of the deposition was resumed, as follows:)

MR. FUTTERMAN: Back on the record.

CROSS EXAMINATION

BY MR. FUTTERMAN:

Q Mr. Redard, isn't it a fact that some of your coal burning equipment in the power plant was very old and that the useful life of some of that equipment was practically zero?

A I wouldn't say it was practically zero. It was quite old, however, some of it.

.

[16] Q Would you answer the question, please?

[17] A I have been told that was correct.

Q Mr. Redard, during the period that Keystone was purchasing coal, was coal cheaper than gas for the purpose for which coal was consumed?

A Yes.

Q During this same period, was coal cheaper than oil for the purpose for which coal was consumed?

A Yes.

Q Was this true throughout the entire period?

MR. HEDLUND: Which period are you talking about, Counsel?

MR. FUTTERMAN: The period during which Keystone purchased coal for its electrical generating equipment.

BY THE WITNESS:

A It was true except for a short period during the summer months at which time C.I.L.C.O. offered dump gas. This, I believe, was for a two-year period.

Q Is it not a fact that C.I.L.C.O. decreased its sales of dump gas after it developed underground storage caverns?

A Yes.

Q Is it not also true that the dump gas was sold at the low rate at which it was sold because of [18] the fact that C.I.L.C.O. could not sell this to the higher rate customers?

MR. HEDLUND: I object to that question. I believe this is more properly directed toward C.I.L.C.O.

BY MR. FUTTERMAN:

Q Would you answer the question, please.

A I am of the opinion that this is correct.

Q Mr. Redard, when Keystone installed its coal burning equipment, is it not a fact that it could have installed a boiler designed to burn other than Fulton County coal?

A Yes.

Q Isn't it a fact that a boiler may be designed to take coals of varying size and quality?

A To my knowledge, yes.

Q When Keystone installed its boilers, was there any reason to expect that Fulton County mines could not supply all of Keystone's coal requirements?

A No.

. . . .

[3]

EXCERPTS FROM DEPOSITION OF
HARRY B. GAUNT, TAKEN JUNE 13, 1969

* * * *

HARRY B. GAUNT,

called as a witness by the defendants herein, having been first duly sworn by the Notary Public, was examined upon oral interrogatories, and he did thereupon depose and testify as follows:

DIRECT EXAMINATION

BY MR. IRVING:

Q Will you please state your full name, sir?

A My full name is Harry B. Gaunt.

Q Mr. Gaunt, what is your current home address?

A My current home address is 1894 Alexander Drive, Lexington, Kentucky.

Q What is your current employment and position, Mr. Gaunt?

A My current employment is with the Kentucky Utilities Company and I am Purchasing Director for the same company.

Q Are you appearing for this deposition this morning pursuant to a subpoena?

A Yes, sir, I am.

Q Mr. Gaunt, would you please briefly describe [4] your professional background and experience.

A Well, my professional background starts off with an engineering degree from the University of Kentucky. I've been with the Kentucky Utilities Company approximately 25 years in various engineering capacities and purchasing, the last ten years being in purchasing functions. I had in between those times some five to six years experience in the coal industry.

Q What was the nature of your experience in the coal industry, sir?

A I was in charge of a mining operation in Harlan County.

Q Mr. Gaunt, do you consider yourself knowledgeable

in the area of fuel procurement, and particularly in the procurement of coal?

A Yes, sir, I believe so.

Q Would you please describe for us the general market area served by Kentucky Utilities for the generation of power.

A Can I talk off the record for a minute?

MR. IRVING: Can we go off the record for a second?

MR. SIMS: Go ahead.

MR. IRVING: Off the record.

[5] (There was discussion off the record, after which the taking of the deposition was resumed, as follows:)

MR. IRVING: Back on the record.

BY THE WITNESS:

A Our general service area covers Kentucky, generally speaking, with parts of Virginia and Tennessee. We serve 78 counties in the State of Kentucky, five counties in the State of Virginia, and one county in the State of Tennessee, for a total of 84 counties in the three combined areas.

BY MR. IRVING:

Q How many power generation stations does KU operate?

A We have four power generation stations, steam, and one hydroelectric station.

Q Where are KU's facilities located?

A Well, the Kentucky Utilities facilities are located, one plant is in southeastern Kentucky, being the Pineville Plant located near Fourmile, Kentucky. We have one plant near Burgin, Kentucky, or Harrodsburg in the central part of the state. We call that our E. W. Brown Generating Station. Connected with that is our hydro station adjacent to it. Also in [6] central Kentucky we have a plant near Lawrenceburg, Kentucky on the Kentucky River. We call that our Tyrone Generating Station.

In the western part of the state near Central City, Kentucky, we have our western facility called the Green River Generating Station.

Q Mr. Gaunt, do any of the four steam stations of Kentucky Utilities purchase coal from mines located in Illinois, Indiana or west Kentucky?

A No, sir, we do not. Oh, west Kentucky, we do purchase from west Kentucky, but we do not purchase any coal from Indiana or Illinois. We do not purchase any coal outside of the State of Kentucky.

Q Which facility or facilities purchase coal mined in west Kentucky?

A Our Green River Generating Station.

Q Is this the only facility operated by Kentucky Utilities which purchases coal from mines in Illinois, Indiana or west Kentucky?

A Generally speaking, yes. However, there has been an instance in years gone by where we might have moved something less than one percent into central Kentucky to E. W. Brown Generating Station.

Q Where would that coal be moved from?

[7] **A** It would be moved from the same coal customers we have in west Kentucky through Louisville and down to our Green River Generating Station—I mean down to our E. W. Brown Generating Station. Excuse me.

Q Sir, why is it that the Green River Station, which does purchase coal from the west Kentucky mines located in the so-called Eastern Interior Coal Province, buys no coal from Illinois or Indiana mines?

A Well, we are what you might say sitting on top of the coal field within a 15 to 25 mile radius. We feel like the freight rates are more competitive at that close a distance, and what little experience in contact work that I have seen as far as tariffs are concerned, when you move coal interstate versus intrastate, they are usually higher, in my experience.

MR. IRVING: Will you please read the last answer.

A (Read by the reporter.)

BY MR. IRVING:

Q Mr. Gaunt, would it be a fair summary of the answer you just gave to say that—

MR. SIMS: Counsel, I am going to object to that. Mr. Gaunt has testified in his own words, and I do not

think it serves any purpose for you [8] to characterize his statement.

BY MR. IRVING:

Q Mr. Gaunt, in your experience have you found that the transportation element in the cost of purchasing coal is an important element?

A Yes, sir, it is an important element in the delivered cost of coal to a facility.

Q From what mines and what companies does the Green River Plant buy coal?

A We buy coal from three companies generally under contract. We buy coal from Pittsburgh-Midway Mining Company, we buy coal from Island Creek Coal Company, we buy coal from Peabody Coal Corporation. One mine of Peabody, generally three of Island Creek Coal Company, and one mine of Pittsburgh-Midway Coal Company.

Q Could you name the mines, sir, of the respective companies?

A The Paradise Mine is the name of the mine of Pittsburgh-Midway. Fies and Briar Creek and East Diamond are Island Creek. I might say that Briar Creek and Crescent are interchangeable, one and the same. I think they have changed names. We buy coal from the Vogue Mine of Peabody Coal Corporation.

[9] Q Mr. Gaunt, about how many miles from the Green River plant are the five mines that you mentioned?

A I would say they were in a radius of 25 miles approximately.

Q None of them are farther than 25 miles from Green River, approximately?

A To my knowledge, they are not.

Q Do these mines serve Green River under contracts of longer than one year in duration?

A Yes, sir, they do.

Q How long are the current contracts under which you purchase coal?

A Our current contracts at present are with Pittsburgh-Midway, we have a ten-year contract; with Is-

land Creek Coal Company we have a five-year contract, and with Peabody Coal Corporation we have a five-year contract.

Q Would you tell us when these three contracts are up for renewal, in other words, when the current terms expire?

A All three contracts will be up for renewal in 1971.

Q Is it your expectation that when these contracts are renegotiated they will be of a similar [10] long-term nature?

MR. SIMS: I am going to have to object. This is speculative.

BY MR. IRVING:

Q Go ahead, sir. You may answer the question.

A I would say that's a management prerogative, but I believe that we would have to have some long-term contracts.

Q Based on your experience with KU, sir, does the company have a practice, as a large utility, of entering into long-term contracts?

A It depends on what the definition of a long-term contract is, but we have had several ten-year contracts, and I would consider that a fairly long contract.

MR. IRVING: I would, also.

BY MR. IRVING:

Q Do you ever buy coal for Green River on the spot market, that is, other than under these three contracts?

A It is an exception other than the rule. It's strictly an emergency situation.

Q When you do buy coal on open account for Green River, where are the mines which supply this coal [11] located?

A They are within the same 25 mile radius of the Green River Plant, in that general area.

Q Do all the shipments of coal under the three contracts you mentioned earlier travel to the mine—strike that, please.

How does the coal under the three contracts you mentioned earlier travel from the mines to Green River?

A Well, the coal from the Paradise Mine of Pittsburgh-Midway travels by Green River barge. The coal from the other two companies, Island Creek Coal Company and Peabody Coal Corporation is carried by rail carrier.

Q Would you please name the railroad or railroads involved in that transport?

A The question, please?

MR. IRVING: Would you please read the question.

Q (Read by the reporter.)

BY THE WITNESS:

A L & N Railroad.

BY MR. IRVING:

Q Is that the Louisville & Nashville?

[12] A Louisville & Nashville Railroad, yes, sir.

Q What is the rail freight rate from the west Kentucky mines to the Green River Station, sir?

MR. SIMS: Which mines, Counsel?

MR. IRVING: I would like an answer, if possible, taking into account all the mines involved.

BY THE WITNESS:

A We have a rail rate on the L & N Railroad Company from Fies and Briar Creek of 74 cents. Their East Diamond Mine carries the 89-cent rate. Peabody Coal Corporation's mine at Vogue carries the 89-cent rate.

BY MR. IRVING:

Q For the purpose of the record, sir, when you say "89 cents" do you mean per ton?

A Eighty-nine cents per ton.

Q How does the barge cost on the Green River compare to that rail rate?

A Well, the barging cost is somewhat lower than the rail rates.

Q Sir, by "somewhat" do you mean approximately half or approximately a third, or what?

A Let's say approximately one third.

[13] Q Mr. Gaunt, approximately how many tons of coal does KU purchase annually for the generation of electricity, and this question concerns all of the coal-burning facilities.

A To be specific, in 1969 we purchased approximately 1,156,802 tons.

MR. STEWART: '68.

BY THE WITNESS:

A (Continuing) '68. Excuse me.

BY MR. IRVING:

Q What you just gave us was for 1968, sir?

A Yes, sir. That was '68 figures. It normally runs somewhere between a million to a million two approximately.

Q By "million two", you mean 1,200,000?

A A million, two hundred thousand.

MR. IRVING: I say this for the sake of the record, for people who will read this later and who are not present today.

BY MR. IRVING:

Q About how many of these tons are purchased annually for the Green River station?

A Well, for the record, in 1965 we purchased 440,000; in 1966 we purchased 476,000; in '67 we [14] purchased 543,000; in '68 we purchased 499,000. I would say roughly I always think about a half million tons of coal per year for the Green River Plant, plus or minus.

Q Is this your largest facility in terms of purchase of coal for the generation of power?

A No, sir, it is not.

Q What station would be, sir?

A Our E. W. Brown Generating Station is—well, I will retract that statement. There is very little difference between E. W. Brown and Green River as far as tonnage is concerned. One year one will surpass the other, and one year—they vary back and forth, but they are roughly in the 475,000 to 500,000 class, tons, each plant.

Q Where are the mines located which supply coal to your central and eastern Kentucky plants, and I am speaking now of Brown, Tyrone and Pineville.

A They are located in what I classify as the Eastern Kentucky Coal Fields.

Q Sir, about how far are these mines from the respective plants which they serve?

A Would you like to have specific distances?

Q I think a general approximation would be fine.

[15] A I would rather not guess. I don't want to trust my memory.

Q Fine.

A Do you want me to give distances to the Brown plant and to the—from Green River?

Q No, sir. These are the distances—

A Eastern Kentucky mines?

Q —between the mines that service the Brown, Tyrone and Pineville, to those respective plants.

A Well, there is possibilities of—to our Brown Plant from what I call the Eastern Kentucky Coal Field, approximately 220 miles and another distance of 180 miles, so roughly 200 miles from one eastern Kentucky field.

Another field in eastern Kentucky Coal Field is approximately 170 miles.

Q This is still the Brown Plant?

A To the Brown Plant.

Another area is approximately 123 miles. Another area is approximately 100 miles.

Q Would those figures be approximately the same for the Tyrone Plant?

A I would add 20 miles to each of those figures for the Tyrone Generating Station.

[16] Q How about the distance between the east Kentucky mines and the Pineville Plant which they service?

A The rail mines do not serve our Pineville Plant. It is served by truck, but the mines are within, rail mines are within a radius of 30 miles of the Pineville Generating Station.

MR. IRVING: Could I please have the answer? I was a little confused between rail lines and rail mines.

A (Read by the reporter.)

BY MR. IRVING:

Q Sir, how far are the truck mines, or the mines that do truck coal, from the Pineville Plant?

A The truck coal for the Pineville Plant is within a radius of ten miles.

Q Mr. Gaunt, how far are the west Kentucky mines which serve the Green River Station from the Tyrone and Brown Plants?

MR. SIMS: Could I have that question read back, please.

Q (Read by the reporter.)

BY THE WITNESS:

A Approximately 260 rail miles.

[17] (There was a short interruption, after which the taking of the deposition was resumed, as follows:)

BY MR. IRVING:

Q It would appear, then, sir, that the east Kentucky mines are somewhere between 60 to 100 miles closer than the west Kentucky mines are to your central facilities.

MR. SIMS: I object to this, Counsel. You can ask specific questions and not lead the witness.

MR. IRVING: I will rephrase the question if it would make counsel for plaintiff happier.

MR. SIMS: We are not concerned with what it appears to you. Simply ask Mr. Gaunt the question.

BY MR. IRVING:

Q Is it a fact, Mr. Gaunt, that the east Kentucky mines are approximately 60 to 100 miles closer to your central Kentucky facilities than the West Kentucky mines are to those facilities?

A That is right, sir.

Q Does this mileage difference result in a significant difference in the freight rates between [18] the two districts?

A Yes, sir.

MR. SIMS: Excuse me. Has there been any testimony as to freight districts?

BY MR. IRVING:

Q The freight rates from the west Kentucky mines compared to the freight rates from the east Kentucky mines.

A (Addressing the reporter) Question.

Q (Read by the reporter.)

MR. SIMS: To what point?

MR. IRVING: I will restate the question.

BY MR. IRVING:

Q My question, Mr. Gaunt, is does this 50 to 100 mile difference result in a significant difference in the freight or transportation cost from the east Kentucky mines to your central facilities compared with the cost from the west Kentucky mines to your central facilities?

A Yes, sir.

Q Could you give an approximation of what the difference would be in the two rates?

A The last rate that was published from west Kentucky to central Kentucky, which I'm referring to [19] as the E. W. Brown Generating Station, was \$2.75, but since that time what we refer to as ex parte 256 and 259 increases that the railroads have requested in the State of Kentucky and possibly over the United States resulted in an additional five percent approximately—or an additional ten percent, we'll say, on top of that \$2.75.

The rates that I gave you previously are as is. They were negotiated during the same procedures, and the rates now from eastern Kentucky to Brown Station are \$2.07 and \$2.11 respectively on the L & N Railroad Company, and \$1.35 on the Southern Railroad, to E. W. Brown.

Q What type of combustion unit do you have at the Green River Station, Mr. Gaunt?

A We have a Babcock-Wilcox boiler.

Q Was this equipment designed to accommodate the local west Kentucky coal which is burned at Green River?

A According to the specifications that I've seen, our engineering personnel gave Sargent & Lundy, our consulting engineers, who in turn gave it to Babcock and Wilcox, general characteristics of western Kentucky coal, in particular, Muhlenberg [20] and Ohio counties, adjacent to the plant.

Q Would the combustion of coal which did not have the characteristics of the local coal cause any problems with the boiler?

MR. SIMS: What coals are you speaking of, Counsel? Any coal?

MR. IRVING: Any coal which did not have the characteristics of the local coal which is burned there, yes, sir.

BY THE WITNESS:

A If your fusion changes on the coal, then you get slag. First of all, I want to say I'm not a combustion engineer, but it does cause us mechanical problems when we get tolerances too wide on the specifications that we give. If the fusion goes down, and we have not given them a fusion that they are supposed to design for of 1900 and it gets down to 1700 or 1800, which I don't think that it would do it, but then we would have some problems on slagging. That naturally gives you mechanical problems and you'd have to back off on your kilowatt hour generation.

Q What other characteristics are the most important to meet in order to avoid inefficiencies or this breakdown in the generation capacity?

[21] MR. SIMS: Object. This is leading.

BY MR. IRVING:

Q You may answer the question, sir.

A There are several ingredients of coal that the design people should know about. They have to know about the sulfur content, they have to know about the fusion, they have to know about the Hard groove groundability index, they have to know about the moisture in the coal, they have to know the general heat rate of the coal, and usually a breakdown of those very—an elemental breakdown of any of the constituents that you can break down.

(There was a short interruption, after which the taking of the deposition was resumed, as follows:)

BY MR. IRVING:

Q Mr. Gaunt, are there any significant differences among the types of coal from different reserve fields?

A To my knowledge there are differences, yes, sir.

Q Will coal vary from seam to seam in its quality and characteristics?

A Under general circumstances, when a seam of [22] coal is placed in the earth and it covers an area of 15 or 20 or 25 miles around, it is identified as a certain seam, the characteristics change, in my experience, very little. It all depends on what the coal operator is doing with his mechanical equipment. They don't have eyes on them, and once in a while they pick up dirt and throw it into the coal or something.

Q Sir, I was referring not within one seam, but coal from one seam compared to coal from another seam.

A Are they different?

Q Yes, sir.

A Yes, sir, they are different.

Q In what characteristics would they differ or often do they differ?

A Well, they will differ in ash content, they will differ in BTU content, they will differ in moisture content, they will differ in ash content, they'll differ in fusion and practically all the analysis.

Q Mr. Gaunt, to your knowledge has Kentucky Utilities ever investigated the possibility of converting to nuclear energy, natural gas or oil as [23] a source of power?

A I would say I'm not in a position to give you a specific answer on that, sir.

Q Mr. Gaunt, I am only asking whether to your knowledge there has been any investigation of such a possibility.

A I feel sure that there has been, but—I think that is the best statement I can make on it, sir.

Q Mr. Gaunt, do you know of any plans for the installation in the near future, and by that I mean in the next five years, say, of a plant which will use nuclear energy, natural gas or oil?

A Not in the Kentucky Utilities Company, sir.

Maybe I better retract that statement. I will have to say that we are, the management of the company, is planning installation of a peak gas dual—gas or oil peaking turbine, which we will use to knock off the peaks

where our system is getting pretty close to its top capability, possibly located here in Central Kentucky. I think the capacity of it is three 17 megawatt units, making a total of approximately 51 megawatt capacity.

Q Do the plans call for this plant to be [24] constructed in the next five years, say?

A It is my knowledge that the management of the company is expecting the gas turbine or gas or oil to be in operation by late 1970.

Q Sir, you also mentioned dual capacity. Would you explain that?

A What I mean by dual is that it can be fired with either oil or gas.

Q Mr. Gaunt, what is the capacity of your hydroelectric plant at Dix Dam?

A At Dix Dam we have three 7500-kilowatt turbines, so that would be roughly around 22,500 kilowatts capacity. Then, the other little hydro station down the river from that is, I believe, a 2,000-kilowatt.

Q Mr. Gaunt, as the purchasing agent for a large utility and as a former operating manager of a coal company, would the experience gained by a producer in strip mining qualify that producer, apart from all other considerations, to go into deep mining?

MR. SIMS: Objection. You did not lay the proper foundation, Counsel, for asking this opinion.

[25] BY MR. IRVING:

Q You may answer the question, Mr. Gaunt.

A (Addressing the reporter) Question.

Q (Read by the reporter.)

BY THE WITNESS:

A Not necessarily.

BY MR. IRVING:

Q Is there a difference in the technology used in strip mining from that used in deep mining, sir?

A Yes, sir, there is a different technology, quite different.

Q Could you specifically name some of the problems that would confront a newcomer to the deep mining of coal?

A Well, an operator who mines underground, he's got to be familiar with ventilation problems, he's got to be familiar with roof bolting problems, he's got to be familiar with operating loading equipment, which is entirely different from strip mining equipment, he's got a whole lot more procedures on draining his mine as far as drainage is concerned.

I guess that's predominantly all that comes to my mind right now.

Q Mr. Gaunt, would you be hesitant to enter [26] into a long term contract with a heretofore exclusively strip mining company who was just beginning to mine deep reserves?

A I would be hesitant.

Q Mr. Gaunt, to your knowledge what is the reserve picture in the west Kentucky region?

A So I won't get in trouble with the Federal Department of Mines and Minerals, I will give you figures of 1966. Estimated remaining bituminous coal reserves in the State of Kentucky in the western Kentucky district, they say approximately 37 billion tons of coal. In eastern Kentucky they say approximately 30 billion tons of coal. There has been some mined, quite a bit mined, in the last three years, so those figures, I would presume, would be reduced.

Q In terms of the economics and feasibility of mining those reserves, do you believe those figures to be accurate in your opinion, sir?

A I'm not going to question the Federal Department of Mines and Minerals, but it is my understanding that in making these reserve calculations that they consider any seam of coal regardless of the thickness, maybe 12 inches up to 6, 10, 12 foot, whatever they happen to be, that they have core [27] drilled and prospected for.

Q In terms of the feasibility of mining coal, would the thickness of the seam be an important element in your decision whether or not to mine that coal?

A Yes, sir, it would be. I don't want to be crawling around in 12-inch coals around the mines.

(There was a short interruption, after which the taking of the deposition was resumed, as follows:)

BY MR. IRVING:

Q Is it a fact, Mr. Gaunt, that the figures you quoted from the Bureau of Mines do not take into account the economic feasibility of mining the reserves?

MR. SIMS: I object to that as leading.

BY MR. IRVING:

Q You may answer the question, sir.

A It's strictly reserves, coal reserves. If they took economics of mining into consideration, I'm not familiar with it.

Q Mr. Gaunt, has the fact that both United Electric Coal Company and Freeman Coal Company have been controlled by General Dynamics had any adverse effect on Kentucky Utilities as a consumer of coal?

[28] A If it has, I don't know anything about it because I don't know Freeman or anything about Freeman or—is it United Electric?

Q Yes, sir.

A (Continuing) I know very little—I've heard of General Dynamics, but outside of that, that's about it.

Q Will there be any adverse effect on KU if General Dynamics is allowed to continue owning both Freeman and United Electric?

MR. SIMS: Now or in the future?

MR. IRVING: I am sorry, Counsel. I did not hear you.

MR. SIMS: Now or in the future?

MR. IRVING: Will you read my question, please.

Q (Read by the reporter.)

MR. IRVING: I think the question is clear.

BY THE WITNESS:

A I don't see how there could be.

BY MR. IRVING:

Q Would there be any benefit to KU by forcing Freeman and United Electric to operate independently of each other, sir?

[29] A I don't see how there could be in that either.

Q Mr. Gaunt, has concentration in the coal industry had any adverse effect upon KU as a consumer of coal?

MR. SIMS: Are you stating, Counsel, that concentration in the coal industry is a fact?

THE WITNESS: May I ask a question?

MR. IRVING: Can we go off the record for a second?

MR. SIMS: All right.

(There was discussion off the record, after which the taking of the deposition was resumed, as follows:)

MR. IRVING: Back on the record.

BY THE WITNESS:

A What do you mean by "concentration"?

MR. IRVING: Strike my last question, please, for the time being.

Miss Reporter, will you please re-read Mr. Sims' last comment?

(The record was thereupon read by the reporter as above recorded.)

MR. IRVING: For purposes of the record, I am not so stating, in answer to Mr. Sims' last [30] comment.

BY MR. IRVING:

Q Mr. Gaunt, are you aware of any past mergers in the coal industry that have had an adverse effect upon Kentucky Utilities as a consumer of coal?

A No, sir, I'm not.

MR. IRVING: Counsel for defendant has no further questions at this time.

(There was a short interruption, after which the taking of the deposition was resumed, as follows:)

CROSS EXAMINATION

BY MR. SIMS:

Q Mr. Gaunt, have there been times in the past when you have gone on the spot market and bought some coal because one of your coal contractors had not delivered the required tonnage?

A Yes, sir, that is true.

Q Has the spot coal market provided an alternative source of supply in such instances?

A It has been an alternative source of supply.

Q When did your Green River Plant go into operation?

. . . .

[41] BY MR. SIMS:

Q In fact, Mr. Gaunt, you have never used gas or oil in any of your coal-consuming generating stations, is this not a fact?

A That is right, sir, other than what I mentioned previously in my testimony, that we use fuel oil to get the fire started in our fossil fuel plant.

Q Mr. Gaunt, you testified in connection with your background that you, I think, had been engaged in some mining operations.

A Yes, sir.

Q When was this?

A 1949 through roughly '55.

Q What did you do in the mining operations at this time?

A Well, I was in charge of operations of the mine, taught classes on mechanical underground equipment, watched preparation at the plants, just general supervision of an underground coal mine.

Q Have you ever had any experience operating a strip mine?

A No, sir, I have had no experience in strip mining.

. . . .

[49] MR. SIMS: I have no further questions at this time.

MR. IRVING: I would like a further brief recess after your last question.

(A short recess was thereupon taken, after which the taking of the deposition was resumed, as follows:)

MR. IRVING: Back on the record. I have only a few more questions, Mr. Gaunt.

REDIRECT EXAMINATION

BY MR. IRVING:

Q With regard to the spot market, when was the last time Kentucky Utilities purchased coal on the spot market for the Green River Station?

A I'd say we purchased, I believe, maybe one time last year. I'd have to check records to see if this is a fact, but I think one time of about a week period last year and just in the last 30 to 60 days.

Q Approximately what percentage of the coal requirements at Green River were then supplied by the spot market?

MR. SIMS: Of which year? Last year?

MR. IRVING: The entire year's total for [50] last year, since this year is not as yet completed.

MR. SIMS: If you know.

BY THE WITNESS:

A It's less than one percent.

BY MR. IRVING:

Q Who supplied that spot coal?

A I believe it was O'Keefe Brothers Coal Company.

Q Do you know what mine it came from?

A It's a mine near Moorman, Kentucky. I do not know right now the name of the mine.

Q Generally, is the amount you are purchasing on the spot market increasing or decreasing, taking the company as a whole, over the last ten years, say?

A It will definitely decrease.

Q Since there was some confusion on cross examination, Mr. Gaunt, would you please describe the function of a peaking station?

A Well, the function of a peaking station is when all your steam generating stations are loaded as much as they'll load without running them into overpressures and getting yourself into a critical condition on your steam temperatures and your boiler pressures, you take a little of the peak off with it, [51] and then that relieves the load on your steam generating units.

Q Mr. Gaunt, does this mean that it is virtually impossible to predict the output and operational cost of a peaking station?

A I would say so, because you don't know how much you are going to have to run it or when.

Q Sir, is the transportation element an important part of the delivered price of coal?

A Yes, sir, it is.

Q Will this transportation element vary widely depending upon where the supplying mine and the receiving facility are located?

A Yes, sir, it varies quite a bit.

Q Mr. Gaunt, in order for a blend of coal to be efficiently burned in a boiler, is that blend blended according to specifications or a proportion?

A It's blended to a percentage.

Q Is this percentage or formula geared to the limitations of the boiler which you mentioned on direct examination?

A Yes, sir, it is, because if you happen to have a seam of coal here (indicating) that don't come up to the characteristics—it's got to be a certain [52] blend put with this (indicating) and this (indicating) to meet the overall specs that Sargent & Lundy and Combustion Engineering was given for the boiler design in the original design.

MR. IRVING: Counsel for defendant has no further questions at this time.

MR. SIMS: I have no further questions.

MR. IRVING: Off the record.

(There was discussion off the record, after which the taking of the deposition was resumed, as follows:)

MR. IRVING: On the record.

Mr. Gaunt, would you like to waive signature? What this means is, do you want to read your deposition, as many people do, and then sign it so that you may correct any errors or mistakes that are made, or will you waive your signature?

MR. MARSHALL: Mr. Irving, if you brought down an ugly old reporter, we might trust her, but I do not see how a girl can be this pretty and still take this down. I believe we would like to have a look at it.

[4]

EXCERPTS FROM DEPOSITION OF
GORDON J. MORRISON, TAKEN JUNE 20, 1969

DIRECT EXAMINATION

BY MR. HEDLUND:

Q Mr. Morrison, are you testifying here pursuant to a subpoena?

A Yes.

Q Would you please state your name and your present business occupation.

A Gordon J. Morrison, Superintendent of Steam Plants, Wisconsin Public Service Corporation.

Q Would you briefly describe for me your educational background and your employment experience?

A I graduated from Marquette University in 1929 with a chemical engineering degree. I started to work for Public Service that fall.

Would you like to know some of my work history?

Q Yes, if you would, please.

A I started as a chemist with Public Service and then went to Results Engineer at the Pulliam plant, was Superintendent of the Oshkosh steam plant, then Superintendent of the Weston plant, Superintendent of the Pulliam plant and am now [5] Superintendent of our three steam plants.

Q How long have you lived in Green Bay?

A I was born here and have lived here all my life except when I went to school, and eight years at Weston and four years at Oshkosh.

Q Now, I would like to ask you some general questions about Wisconsin Public Service, Mr. Morrison.

First of all, would you generally describe its electric service area?

A We serve the northeastern part of the State of Wisconsin, the southern boundaries go down to Oshkosh, and we serve gas in Sheboygan and up the east coast of Lake Michigan to Sturgeon Bay, cross over to Meno-

minee and Marinette, and west to Rhinelander, Wausau and Stevens Point.

Q Is Wisconsin Public Service an investor-owned utility?

A Yes.

Q As of the year-end 1968, approximately what was Wisconsin Public Service's generating capacity?

A I do not have the figures with me, but somewhere around 600,000 kilowatts.

Q How many coal-fired generating stations [6] do you own and operate?

A We own and operate three at the present time.

Q Could you tell us where those are located?

A Our largest station is at Green Bay, the Pulliam plant. The next one is at Weston, where we have two units. That is south of Wausau about thirteen miles.

The third one, a small, old plant, is at Manitowoc.

MR. CUSACK: Excuse me. Is that the same as the Oshkosh plant?

BY THE WITNESS:

A The Oshkosh plant was a small plant that has been decommissioned.

MR. CUSACK: I see. Thank you. Excuse me.

MR. HEDLUND: Will the Government stipulate that Wisconsin Public Service is not a coal consumer within the relevant market alleged by the Government at issue in this case?

MR. CUSACK: No.

BY MR. HEDLUND:

Q Do you have generating plants at present that burn fuel or use energy other than coal?

[7] A Our Western plant burns gas, natural gas, when it is available.

Q What other generating facilities do you have?

A We have sixteen small hydro plants located in our territory, on the Peshtigo River, the Menominee River and the Wisconsin River.

Q Do you have an interest in any other company that operates hydroelectric generating stations?

A We have a one-third interest in the Pettenwell and Castle Rock plants, that have a capacity of about 35 megawatts, on the Wisconsin River.

MR. CUSACK: May I ask a question, please?

MR. HEDLUND: Yes.

BY MR. CUSACK:

Q Is 35 megawatts equivalent to 85,000 kilowatts?

A Yes.

MR. CUSACK: Thank you.

MR. HEDLUND: Mr. Cusack, you have been in this case long enough so that you should know that by now.

MR. CUSACK: I thought it would be appropriate to insert it at this point in the record, however.

BY MR. HEDLUND:

Q Do you have any generating facilities that use diesel fuel?

A We have two diesel installations, one at Eagle River and one at Rhinelander.

Q In the year 1968 can you tell me approximately what percentage of your generating capacity was represented by generating stations using hydroelectric power or diesel fuel, and I also want you to include in that your interest in the two hydroelectric facilities that you mentioned previously. Do you understand the question?

A I am not too clear on it. You want the amount of generation by hydro, gas and diesel?

Q Yes, including your part ownership or interest in the Wisconsin River Power Company.

A Offhand I would say about 30 per cent.

Q Wisconsin Public Service also sells gas, does it not?

A Yes.

Q At present, or in 1968, who was your largest gas customer?

[9] A I believe the American Can Company, Northern Paper Mill Division, was our biggest gas customer.

Q Where is that located?

A That is in Green Bay.

Q How long have they been a gas customer?

A Only about a—well, they have used gas in their

dryers for some years, maybe five or six years, but as to gas as a fuel for generation, it has only been about a year.

Q What did they use for generation prior to that?

A They burned coal.

Q When you say "generation", this is for electrical generation?

A Yes; electrical generation.

Q Do you know approximately how many tons of coal a year they consumed before they converted to gas?

A I believe they consumed from 150,000 to 200,000 tons a year.

Q How do you know that?

MR. CUSACK: The Government objects and moves to strike on the basis of lack of first- [10] hand knowledge.

BY MR. HEDLUND:

Q How do you know that?

A Well, I have seen the boats come in right across the river from us, and I have been in their plant, and I would assume that that is about what the coal consumption was.

MR. CUSACK: I renew my objection and move to strike.

BY MR. HEDLUND:

Q Do you presently have under construction a nuclear fuel generating station?

A Yes.

Q Where is that to be located?

A In Kewaunee County, about six or seven miles south of the city of Kewaunee, Wisconsin.

Q Are you constructing that by yourself, or in connection with other utilities in Wisconsin?

A We have two other partners, Wisconsin Power & Light Company and Madison Gas & Electric, that are part owners and will share in the output of the plant.

Q What will be the rated capacity of that plant when it is completed?

A 527,000 kilowatts.

[11] Q When do you project that that will be completed and on line?

A We are expecting to get it on the line in the fall of 1972.

Q When that plant is in operation, can you tell me what percent then of your base load will be nuclear generated?

A Our plan is to run the nuclear plant at full capacity when it is available, and then you would like to know what part—

Q What percentage of your system's total base load then would be nuclear generated.

A Of course, our part of this 527,000 is 40 per cent, so it is on the order of about 200,000 kilowatts that will be Public Service generation, and our capacity, including that 200,000, and our part ownership in Edgewater would be about 200,000 out of 900,000.

Q Putting aside the Edgewater plant, when the Kewaunee nuclear plant becomes fully operational, will this result, in your judgment, in a lessening of coal consumption by Wisconsin Public Service Company?

A Yes.

[12] MR. CUSACK: The Government objects to the question on the grounds that it is leading.

MR. HEDLUND: You may answer the question.

BY THE WITNESS:

A We expect the nuclear generation to be cheaper than generation by coal.

MR. HEDLUND: May I have the two preceding questions and answers read, please, Mr. Reporter.

(The record was thereupon read by the Reporter as above recorded.)

MR. HEDLUND: Thank you.

BY MR. HEDLUND:

Q Mr. Morrison, what remains of the market for coal for home heating in Green Bay at the present time?

A Well, it has been declining, due to the conversion to natural gas by many of the residences in the city.

Q Has Wisconsin Public Service been increasing its number of residential heating customers steadily through the years?

A Yes.

Q Has this been principally at the expense [13] of coal?

A Yes.

Q Can you give me approximately the annual total coal consumption for your Pulliam plant each year for the past three years? I do not want to hold you to exactly accurate figures, but generally, if you can tell us.

A I think in 1967 we got 956,000 tons for Pulliam, in 1968 it was 968,000 tons and this year we are figuring on about 990,000 tons.

Q In those years was all of that coal produced from mines located in the midwest?

A No. Some of it is eastern coal.

Q Can you tell me roughly the percentage of eastern coal that was burned in those two years?

A Approximately 40 per cent came from eastern suppliers and 60 per cent from Illinois.

Q How is coal—

A I might revise that a little bit because last year we did not get all we ordered from Illinois because of the Belt Line strike, so we had to supplement that with coal from the east.

Q Could you explain why the Belt Line strike was a factor? You are referring, are you, to the [14] Chicago Belt Line?

A Yes. All of our coal is shipped from the mine to Chicago and transferred to the Belt Line, who bring it to the Rail-to-Water unloading or reloading port, where it is loaded into boats.

The Belt Line was on strike for about 100 days, and during that period we did not get any coal from Illinois.

MR. CUSACK: Off the record, please.

(There was a discussion off the record, after which the taking of the deposition was resumed as follows:)

MR. HEDLUND: On the record.

BY MR. HEDLUND:

Q When you stated that all of your coal comes to the Belt Line, you were referring to coal from midwestern mines?

A Yes. In the east, of course, there are a number of loading docks owned by the railroads, the C. & O., the B. & O., the Norfolk and Western.

Q How is coal delivered to the Pulliam plant?

A All of our coal at Pulliam is received from self-unloading vessels.

[15] Q Lake vessels?

A Yes, lake vessels.

Q Is the plant able to receive coal by rail?

A No.

Q With respect to the midwestern coal that you buy, where do you take title to the coal, or where do you buy the coal?

A We buy the coal loaded into vessels.

Q At Chicago?

A At Chicago or at Lake Erie ports.

Q Typically, how many tons of coal are brought in by each vessel?

A Anywhere from 12,000 to 19,000 tons per boat.

Q I assume, then, that you pay the transportation costs from Chicago or from Lake Erie ports?

A Yes. We pay the lake carrier ourselves.

Q Is there any benefit to you to have a boat fully loaded in making a shipment to you, or does it matter?

A It doesn't make much difference to us, except that the boat owner wants his boats filled in order to economically transport coal.

[16] Q How is your transportation cost determined? Is it the number of tons in the vessel or do you pay per vessel, or how is it done?

A No. We pay per ton in the vessel, so it does not make that much difference to us, but it does to the boat owner, who wants to make sure the boats are fully loaded.

Q Will they bring a half-loaded boat to you?

A No.

Q Now, could you tell me the characteristics of the coal for your Pulliam plant which you require on a contract basis, that is, the characteristics of the coal that you contract for.

A We prefer to have coal with a BTU of somewhere between 12,000 and 14,000 BTU per pound, and ash, of course, as low as we can get it. 6, 8 or 10 per cent is probably typical. We prefer to have low sulfur coal.

Q Why are these characteristics important to you?

A We use pulverizers on all our boilers and if the BTU is too low, we can't get full capacity out of the boiler, and of course, that [17] cuts down our generation. Sulfur is important because we have to keep the exit gas temperatures from the chimneys higher with high sulfur coal.

Ash disposal is a problem. We collect the fly ash with electrostatic precipitators and we have to dispose of it, and it costs us from 25 to 30 cents a ton to dispose of ash.

Q With respect to Pulliam, is there any benefit to Wisconsin Public Service having—strike that.

Q Is there any benefit to Wisconsin Public Service in being able to purchase coal from both the east and midwest?

A Yes. We believe there is. We can negotiate prices between the two locations quite readily.

Q To your knowledge, have you ever contracted for coal produced in the Fulton-Peoria County area in Illinois, in the Central or Springfield area, or in the so-called Belleville Freight Rate District of Illinois?

A We have never contracted for Fulton County coal. We did contract for some Murdock [18] coal, but I am not sure if Murdock is in Illinois.

Q I was not including Murdock, no. I was confining it to the mines near or around Springfield.

A No. We never contracted for Fulton County coal.

Q What about the Belleville area, the Belleville Freight Rate District?

A There again, I say I am not sure where Murdock is.

Q Murdock is over in the eastern portion of the State.

A No. We never contracted for coal from the Belleville District.

Q Why is that, and I ask this question for all three of the districts I have named.

A Well, we have usually wanted coal close to 12,000 BTU or over.

Q Have you ever contracted for Indiana coal?

A No. We never contracted for Indiana coal for our Pulliam plant.

Q Why is that?

A The price is usually higher than Southern [19] Illinois coal.

Q What about West Kentucky? Have you contracted for West Kentucky coal for Pulliam?

A We have not contracted for it. We have used it as a substitute, and there again the price is usually higher than Illinois coal—the freight rate is higher, I should say, not the coal itself. The freight rate makes it higher.

Q Have you ever considered United Electric Coal Companies on its own as a potential supplier for your Pulliam plant?

A As far as I know, we have never been contacted by United Electric, to buy their coal.

Q If United Electric produces no coal with a BTU value approaching 12,000, would you consider them a potential supplier?

A No.

Q What would happen were you to use, in your equipment at Pulliam, a low BTU high ash coal?

A We would have trouble getting full capacity out of our generators, because of not being able to pulverize it fast enough to keep the load up.

Q Would you have any maintenance problems?

[20] A I don't believe so, except if the ash fusion was low, we could get slagging.

Q Now, I would like to turn to your Weston plant. I know you have mentioned this before, but Weston is located where?

A Weston is about 13 miles south of the city of Wausau, on the Wiscosin River.

Q Approximately what has your total coal consumption been running there in the last two years or so?

A About 125,000 tons a year.

Q What is the generating capacity of that plant?

A We have two generators, one with a capacity of about 70,000 and the other, 90,000 kilowatts.

Q Over the past two or three years or so, approximately what per cent of the fuel burned to generate electricity at Weston was gas?

A In the last couple of years?

Q Yes.

A The gas amounted to about 65 per cent of our fuel at Weston.

Q Was gas burned throughout the year or only in the summer months?

[21] A In the summer months we have gotten gas almost continuously. In the cold weather our load dispatcher often has to take us off of gas for periods sometimes of a couple of months, sometimes for a week here and there, and sometimes for only a day or two.

Q How has your fuel cost experience at Weston been between coal and gas?

A Coal at Weston at the present time is about 36 cents per million BTU's and we are getting gas for 28 cents per million BTU's.

Q Is there ever a time at Weston when you are burning coal and gas at the same time?

A Yes.

Q Could you explain to us how that comes about?

A Our No. 2 boiler, which is the largest of the two, has gas burners and coal burners.

We have three pulverizers that supply nine burners and we can run one pulverizer with three burners on coal and the other six burners on gas, or six burners on coal and three on gas, or completely on gas or completely on coal.

Q How is coal delivered to the Weston plant?

[22] A It is all delivered by rail.

Q Are you able to obtain a volume or unit train rate for the coal shipped to Weston?

A As yet we have not been able to get a unit train setup for Weston.

Q Why is that?

A Well, one of the reasons is that the unit trains want to run on a schedule, and with us burning gas over there we can't give them a schedule for the year-around delivery of coal.

Q Is BTU as important a consideration at Weston, the BTU value of the coal, as important a consideration at Weston as it is at Pulliam?

A Pretty much the same. We have pulverizers in both places.

Q Again with respect to United Electric, if it were the fact that United Electric produces no coal having a BTU value of approximately 12,000 BTU, would you consider United Electric as a potential supplier for that facility?

A We would have trouble keeping a full load on the units with coal that was less than 12,000 BTU's per pound.

Q With respect now to the plant at Manitowoc, [23] approximately how many tons of coal do you burn there a year?

A From 7,000 to 10,000 tons per year.

Q Where is that coal produced?

A That's eastern coal that we buy from Reiss Coal Company.

Q Why do you confine the burn at that plant to eastern coal?

A It is necessary that we have high BTU coal, as we have stokers in this plant, and should get coal that has high fusion temperature, and we try to get 13,000 BTU or better there.

Q During the past two years or so were you visited by representatives of Humble Oil & Refining Company?

A Yes.

Q What was the purpose of their visit?

A They wanted to see if they could sell us coal during this period when they were developing coal mines, before they got into production of liquid fuel or gaseous fuel.

Q Where was the coal to be located that they were talking to you about?

A I believe in Southern Illinois, although [24] it was a low BTU coal.

Q Did you express an interest in that coal?

A No. We thought it was too low a heating value for our needs.

Q Is Wisconsin Public Service Company concerned about the air pollution problem?

A Yes, we are.

Q Could you tell us briefly what measures you have taken or what you have under way to improve that situation?

A At the present time we have precipitators, electrostatic precipitators, on six of the units at Pulliam.

Our two older units, which are not used very often, have no precipitators.

At Weston we have no precipitators, but we are running a study at the present time to see if we should install precipitators or if it is possible to get enough gas to run both units with gas.

Q In your decision to enter into this joint venture to construct a nuclear fuel generating station were air pollution considerations one of the factors in making that decision?

[25] A It was a factor, yes.

Q Have you had an opportunity to study developments with respect to controlling sulfur oxide emission at coal-fired generating plants?

A Yes. I am a member of the Prime Movers Committee of the Edison Electric Institute, and we have heard the discussion by Union Electric at one of our meetings telling of their experiments in St. Louis.

Q Is that the combustion engineering process?

A That is the combustion engineering process.

Q What is your understanding as to the efficacy and the state of that development at Union Electric?

MR. CUSACK: I object to that on the ground of hearsay.

MR. HEDLUND: You may answer.

BY THE WITNESS:

A They have a lot of problems, and I think they are slowly solving some of them. Whether it is going to be a

successful means of avoiding sulfur oxides, the air pollution by sulfur oxides, I don't know.

As you know, there are a lot of experiments that have been going on all over the country, to see [26] what can be done about removing sulfur oxides from coal gases.

Q In your opinion, Mr. Morrison, with respect to the business of Wisconsin Public Service, does coal compete with other forms of energy such as nuclear energy, natural gas and oil?

A Well, in our case we can get natural gas cheaper than coal. Of course, we can't get the quantities to run all our boilers on natural gas.

We decided to build a nuclear plant because we thought it would be cheaper power than we could produce with coal. I think fuel oil is out of the question, it is so high up here. We only use fuel oil to start up boilers.

Q With that, then, does coal compete with nuclear energy and natural gas as far as your system is concerned?

A Yes.

Q In your opinion, Mr. Morrison, has the common ownership of Freeman Coal Mining Corporation and United Electric Coal Companies had any adverse effect upon Wisconsin Public Service?

[27] A None that I know of.

Q In your opinion, can you conceive of any benefit to Wisconsin Public Service that would follow from a divestiture of United Electric Coal Companies from General Dynamics?

A Nothing that I know of.

MR. HUDLUND: You may inquire.

CROSS EXAMINATION

BY MR. CUSACK:

Q Mr. Morrison, in regard to your Manitowoc plant, that is a very old generating station, is it not?

A Yes. It was built in 1917.

Q Your company did plan to close this down, did it not, until the demand for power so increased?

A Yes. We are still, and have been for years, studying the need to keep it active.

Q Would you say that it is a fairly marginal generating station at the present time?

A Yes.

Q Now, the Manitowoc plant, you say, receives eastern coal?

A Yes.

[28] Q Do you have any plans to build any more hydroelectric plants?

[29] A No, we do not.

Q Now, Mr. Morrison, you testified that your company has a portion of the Edgewater plant, is that correct?

A Yes.

Q Where is that located, sir?

A At Sheboygan.

Q Is that south of Sheboygan on Lake Michigan?

A Yes.

Q Who owns that plant now, sir?

A Wisconsin Power & Light own the first three units.

Q I see.

A We are going to be part owner of the fourth unit.

Q How many kilowatts are burned in the fourth unit at this Edgewater plant?

MR. HEDLUND: Are you sure you want to ask how many kilowatts are burned?

MR. CUSACK: All right.

BY MR. CUSACK:

Q What is the kilowatt capacity?

A 310,000 kilowatts.

Q Is it a fact, sir, that the Edgewater [30] plant formerly purchased coal from the Reiss Coal Company?

A Yes.

Q Has this situation changed?

A Yes.

Q What is the situation now, sir?

A As I understand it, they are going to buy their own coal cars and get coal from Fulton County, the Peabody Coal Company.

Q This will be brought up from Fulton County by unit train, will it not, sir?

A Yes.

Q And that is on the Northwestern?

A On the Northwestern, yes.

Q All of the Edgewater plant, including the fourth unit which you have a one-third interest in, will be supplied by the Fulton County coal, will it not, sir?

A Yes.

Q So at Edgewater, if the fourth unit has a 310,000 kilowatt capacity, you would receive a third of that, so you would receive over 100,000 kilowatts from the Edgewater plant—

A Yes.

* * *

[42] Q Started using Illinois coal?

A Yes. I think it was after the war.

Q After the war.

A Yes.

Q So now the percentage is 60 per cent midwest coal and 40 per cent eastern coal, is that correct, sir.

A Yes, except for last year, when we had the Belt Line strike, which I explained.

Q Mr. Morrison, has your company faced increasing difficulties in being able to obtain coal?

A Yes.

Q Is it your opinion, sir, that there is a shortage of coal?

A Yes.

Q Would you say that this was a serious shortage?

A I am afraid it is. We are especially vulnerable because of not being able to get coal by rail during the wintertime, and if we don't get it during the navigation season, we are in [43] trouble.

Q It is a fact, is it not, sir, that you had some discussions with officials from the Truax-Traer Division of Consolidation Coal in regard to possibly acquiring or purchasing some coal from their Montana mine?

A Yes; Consolidation Coal Company.

Q This is a Montana mine that is supplying coal to one of the utilities of Northern States Power?

MR. HEDLUND: Now, who is testifying here, Mr. Cusack, you or Mr. Morrison?

BY MR. CUSACK:

Q Is that correct, sir?

MR. HEDLUND: I object to that.

BY MR. CUSACK:

Q Is this mine, sir, of Consolidation the mine in Montana that is supplying coal to one of Northern States Power's generating stations in Minnesota?

A Yes.

MR. HEDLUND: The same objection. I think this is outrageous, Mr. Cusack, your testifying this way. You are not under oath.

[44] BY MR. CUSACK:

Q What is the BTU rate of the coal mined in Montana that is supplying that Northern States Power plant, do you know, sir?

MR. HEDLUND: I object on the basis that no foundation has been laid for Mr. Morrison's knowledge with respect to that.

BY THE WITNESS:

A I was told that it would be under 10,000 BTU's per pound.

MR. HEDLUND: I move to strike.

BY MR. CUSACK:

Q Who told you that, sir?

A The salesman of Consolidation Coal Company.

Q In a conversation that you had with him?

A Yes.

Q Thank you.

Now, sir, assuming that the shortage of coal continues, and assuming that you are able to blend Fulton County coal with the higher BTU coal from the east, you anticipate that there is a serious possibility that you may have to purchase Fulton County coal to supply your generating stations?

[45] MR. HEDLUND: Which generating stations?

MR. CUSACK: Please answer the question.

BY THE WITNESS:

A Any kind of coal would be better than no coal at all.

BY MR. CUSACK:

Q Is this getting to be the situation, that there is becoming no coal at all?

A Well, we are so far pretty well on schedule with our coal deliveries, but coal salesmen seem to indicate that the miners may have more work stoppages and we may find ourselves getting pretty short by the time the fall comes around.

Q You anticipate, then, that you may have to use lower BTU coal?

A It is possible, yes.

Q Is it possible, then, that you also may have to use Fulton County coal?

A Well, like I say, we would use anything if we were desperate.

Q You may even have to use coal from Montana?

A We would have to.

Q What is the BTU on that again, about?

A Under 10,000.

[46] Q Sir, is there any possibility that your Pulliam plant here in Green Bay could at some time get a unit train rate from Illinois mines as the Edgewater plant has received a unit train rate?

A It is possible. We have studied it a number of times in the late years, but so far it is not economical.

Q At the present time?

A At the present time.

Q Have you studied the possibility of changing your boilers at Pulliam to take all midwest coal?

A No, we have not. We know it would be quite costly to convert them.

Q You testified, sir, that the acquisition of United Electric by General Dynamics did not, as far as you know, harm your company.

MR. HEDLUND: I object to that as a false characterization of Mr. Morrison's testimony.

MR. CUSACK: I would like to pose a hypothetical question to you, sir.

BY MR. CUSACK:

Q Assuming a Midwest coal producer was acquired by another corporation and this other corporation, the parent company, made no efforts [47] to increase the mining capacity or production of this coal company, or to open up new mines, develop new coal reserves to increase the production of that company, would you consider this to be harmful to the public utilities in the midwest, including your own company?

MR. HEDLUND: May I have the question read, please, Mr. Youker.

Q (Read by the Reporter.)

BY THE WITNESS:

A I believe it would be. Public utilities are burning more coal every year and consequently the coal miners have to produce more.

BY MR. CUSACK:

Q And there is a shortage, is there not?

A There is a shortage, definitely.

Q Mr. Morrison, the Pulliam plant here at Green Bay does burn high sulfur coal, does it not?

A Yes.

Q And you have electrostatic percipitators here at Pulliam?

A Yes, on six of the eight units.

. . . .

[3]

EXCERPTS FROM DEPOSITION OF
JOHN SAMUEL MOORE, TAKEN JUNE 20, 1969

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MR. IRVING: Miss Jasiorkowski, would you swear the witness, please.

(The witness was thereupon duly sworn.)

JOHN SAMUEL MOORE,

called as a witness by the defendants herein, having been by me, the said Joyce Jasiorkowski, as Notary Public aforesaid first duly sworn, was examined upon oral interrogatories and he did thereupon depose and testify as follows:

DIRECT EXAMINATION

BY MR. IRVING:

Q Will you please state your full name, sir.

A John Samuel Moore.

Q What is your current home address, Mr. Moore?

A 105 Linden Lane, Springfield, Illinois.

Q What is your current occupation and position?

A I am a sanitary engineer 4, with the Illinois State Health Department in the Bureau of Air Pollution Control, which is housed in the Division of Sanitary Engineering. I am currently the project administrator for the Illinois Coal Study, which started on March 1st of this year.

Q Are you appearing for this deposition this [4] afternoon pursuant to a subpoena, Mr. Moore?

A Yes, I am.

Q What is the nature of your duties as a sanitary engineer for the Bureau of Air Pollution?

A Basically, my duties now are mainly administrative. I have eight engineers who work for me. I schedule investigations for them, I check over their work, their reports, the permits that they write. I also serve as a coordinator for the data processing programs for air pollution, and act in some degree as a liaison with the Federal Government in air pollution matters.

Q Would you please describe the connection that your position has to the Illinois Air Pollution Control Board?

A Yes. The Illinois Air Pollution Control Board is an independent agency which has nine members appointed by the Governor. The Bureau of Air Pollution Control is the technical staff for that Board. We do all of the investigative work and essentially all of the work of the Board except the final policy making. The Chief State Sanitary Engineer, who is my superior, is the Technical Secretary for the Illinois Air Pollution Control Board.

[5] Q Mr. Moore, would you please describe briefly your educational background and professional experience.

A I received my Bachelor of Science degree in 1961 from the University of Illinois and worked as a field engineer for a period of one year for the Northeastern Illinois Metropolitan Area Planning Commission. Prior to that, I was connected with the Atomic Energy Commission and worked at the Nevada Proving Grounds in environmental health related to radiation. That experience led me to the Department of Public Health in Springfield, Illinois, to what was then the Bureau of Radiological Health and Air Pollution Control. At that time there was no air pollution law in Illinois, but it was established in 1963, and I have worked in the air pollution field in the State since its inception.

Q Do you consider yourself knowledgeable and expert in the field of air pollution control?

A Yes, I would say so. I was fortunate to get in on the ground floor.

Q Mr. Moore, could you please describe the current Illinois air quality regulatory scheme?

[6] A The Illinois Air Pollution Control Act places the responsibility for the control of air pollution in Illinois with the Illinois Air Pollution Control Board. As I stated earlier, the technical staff of the Board of which I am a member serves that agency, in investigative work and hearing matters and so on.

If we receive a complaint of air pollution, we are charged by law with investigating that complaint and try, through conference and conciliation, to reach some successful conclusion. If conference and conciliation does not work out, then the Board may call a hearing if the Technical Secretary files a formal complaint with the

Board. The Board may then make a final order or determination, and if that final order or determination is violated, then the Board turns the matter over to the Attorney General of the State for injunctive relief or fines.

Q Is the Air Pollution Control Act state-wide in its application?

A Yes, it is, with the exception of the provision in the Act which allows for a variance—I am sorry—an exemption to certain political sub- [7] divisions in the State if they qualify by having an ordinance which is in substantial agreement with the State regulations or more stringent, and if they can prove to the State that they are pursuing this ordinance to the best of their ability in controlling air pollution.

Q By "pursuing this ordinance", would that go to the enforcement of the ordinance?

A Yes.

Q Has a certificate of exemption been issued to the City of Chicago?

A Yes, it has.

Q What enforcement powers does the Board have under the Illinois statute?

A Well, basically, as I stated before, the Board may cause to be instigated in a court of competent jurisdiction through the Attorney General's office, injunctive relief and/or fines.

Q Mr. Moore, does the current Illinois law make provision for the granting of a variance to a given air pollution source?

A Yes, it does.

Q Could you describe that provision briefly, sir?

[8] A A variance may be granted to a party or an industry if they can show that there is no other method currently available to solve their problems, and if they can show that definite progress is being made toward the eventual elimination of the problem that they have, we will grant a variance, generally for a six-month period, but they can be renewed.

Q Going back for a minute, sir, you mentioned that the City of Chicago had been granted a certificate of

exemption. Could you please describe the basis for this granting of an exemption to the City of Chicago?

MR. SIMS: I will have to object to this, counsel. You have not established that the witness is in any position of authority to grant exemptions or make policy decisions whatsoever. He testified he is on the technical staff, and I think the policy decisions should be asked of the members of the Board.

BY MR. IRVING:

Q Mr. Moore, do you know of your own knowledge that the City of Chicago has received a certificate of exemption?

A Yes.

[9] Q If you know the basis of that exemption, will you please describe it for us at this time?

MR. SIMS: I object to that.

BY MR. IRVING:

Q You may answer, sir.

A The basis, as I understand it, for granting an exemption to the City of Chicago was that the ordinance under which the Department of Air Pollution Control operates was in substantial agreement with the State regulations as far as the definition of air pollution is concerned, and in some instances as stringent as the State regulations, and in some other instances even more stringent, and further, based upon an agency that is operating and doing what in the Board's estimation is a creditable job.

Q Mr. Moore, in your capacity as liaison between the Illinois Bureau of Air Pollution Control and the National Air Pollution Control Administration, have you become familiar with the interrelationship of the State and Federal Air Pollution Abatement and Control programs?

A Yes.

Q What is the nature of the involvement of the Federal Government in sulfur oxide pollution [10] control in Illinois?

MR. SIMS: I will have to object to this, counsellor. We took the deposition of John Middleton, and I think the witness will agree that he is much more competent

in this area to testify and he did so testify in his deposition.

MR. IRVING: I think the record will show that my question specifically asks of the Federal involvement in the State of Illinois. Mr. Moore has testified that he has acted as a liaison between the two governmental regulatory bodies, and I think he is eminently well qualified to testify to that fact.

MR. SIMS: As long as he restricts it to the State of Illinois.

MR. IRVING: Miss Reporter, will you please re-read the question for Mr. Moore.

Q (Read by the Reporter.)

BY THE WITNESS:

A Two areas involving this State have been designated by the Federal Government as part of an interstate air quality region. The six-county north- [11] eastern Illinois area is involved in one of these regions, and three counties, consisting of Madison, St. Clair and Monroe counties in the metroeast part of the State are involved in the other area.

As part of that designation, the Federal Government issued criteria documents which gave the states a basis on which to develop their quality standards and certain methodology to reduce the levels of sulfur dioxide and particulates in these two areas in which the State is participating.

Q What is the duty or the nature of the participation of the State of Illinois in these designations?

A Basically, the designation sets up a timetable consisting of first a 90-day period in which the states have an opportunity to transmit to the Federal Government a letter of intent, which is exactly that, stating their intention to participate or not participate in these regions.

After that initial 90-day period, a 180-day period is allowed for the states to set an air quality standard. That's the period that we are now in, in the Chicago area.

After that first 180-day period, a second [12] 180-day period is allowed for the states to develop the methodology

and set the emission standards to reach the air quality standards which presumably would have been acceptable to the Federal Government.

Q Sir, when you say that the State is currently in the first 180-day period with respect to the Chicago area, does that mean that it has transmitted its letter of intent to comply with Federal directives with respect to that area?

A In the Chicago area, yes.

Q Where does the State Government now stand with respect to the timetable as to the St. Louis Metropolitan area?

A We are still in the 90-day period. We have not transmitted the letter yet.

Q In your opinion, Mr. Moore, is it likely that the State of Illinois will comply with Federal directives?

A Definitely.

Q In your opinion, Mr. Moore, is it likely that the State, in complying with these Federal directives, will confine the scope of its regulation of sulfur oxides only to the Chicago and St. Louis [13] areas?

MR. SIMS: I will object to that. As I said before, first it is leading and secondly, the witness is not in a policy-making position and would not know what the policy makers will do. It is pure speculation.

MR. IRVING: I believe the record will demonstrate Mr. Moore's qualifications to answer this question.

Would you like the question repeated, Mr. Moore?

THE WITNESS: Yes, please.

MR. IRVING: Miss Reporter, would you please read the question.

Q (Read by the Reporter.)

MR. SIMS: I repeat my objection.

BY THE WITNESS:

A It's my opinion that the regulations both on sulfur dioxide and particulates, speaking to air quality standards, will be state-wide.

BY MR. IRVING:

Q In your opinion, Mr. Moore, is it likely that the State, in complying with the Federal directive, will enact a regulation which incorporates a [14] sulfur content restriction?

MR. SIMS: Again, the same objection.

BY MR. IRVING:

Q Would you please answer the question.

A In my opinion, that's true.

MR. SIMS: Would you repeat the last question, please.

Q (Read by the Reporter.)

BY MR. IRVING:

Q Mr. Moore, when you say that is true, do you mean it is likely?

A It is likely that there will be a sulfur limitation on fossil fuels.

Q Mr. Moore, in your opinion and to your knowledge as liaison in the air pollution control field for Illinois to the Federal Government, will the increase in Federal supervision have any effect on the variance provision presently incorporated in the Illinois statute?

MR. SIMS: Could I have that question back, please.

Q (Read by the Reporter.)

MR. KEMPF: Off the record.

(There was a discussion off the record, [15] after which the taking of the deposition was resumed as follows:)

MR. KEMPF: On the record.

MR. SIMS: Again, I object. The witness is not in a position to give opinions on these matters.

BY MR. IRVING:

Q Mr. Moore, would you please answer the question.

A Yes, I am certain that this will affect the variance procedures, but in any event, it is the plan of the State to tighten up on the variance requirements anyway.

Q By "tighten up", would you please explain what you mean a bit more fully, sir.

A In many cases the variance situation has already served its purpose. It was mainly directed at open burning situations throughout the State, and many of these cases have already been cleared up. We, therefore, would severely tighten the procedures for getting a variance and for granting a variance, and in no cases where air pollution would be caused could we allow a variance.

Q Mr. Moore, in your opinion, and to your [16] knowledge as liaison for Illinois to the Federal Government on the subject of air pollution control, will the advent of Federal supervision be likely to lead to any other changes in the State regulatory pattern?

MR. SIMS: The same objection.

BY MR. IRVING:

Q You may answer, sir.

A Yes, I am certain that they will. We are already feeling these changes in our relationships to the air quality regions.

Q Is it likely that the enforcement powers will be broadened?

MR. SIMS: Same objection. Also, it is leading.

BY MR. IRVING:

Q Mr. Moore, you may answer.

A The Board has asked that Illinois Air Pollution Control Act be amended by the current legislative session to strengthen the enforcement procedures, and I am sure as time goes on we will be asking for more stringent enforcement measures to be given to the Board.

(There was a short interruption, after [17] which the taking of the deposition was resumed as follows:)

BY MR. IRVING:

Q Mr. Moore, is the combustion of coal the primary source of sulfur oxide pollution in the City of Chicago?

MR. SIMS: Objection. It is leading.

MR. IRVING: On what grounds?

MR. SIMS: Leading, counsellor.

BY MR. IRVING:

Q You may answer, Mr. Moore.

A Yes.

Q Sir, on what basis do you conclude this?

A On emission inventory data collected both by the State and by the City of Chicago.

Q Sir, what is the principal source of sulfur oxide pollution in other urban areas in Illinois?

A With some minor—

MR. SIMS: What other urban areas, counsel?

MR. IRVING: Throughout the State.

MR. SIMS: Has it been established that there is pollution in other urban areas throughout the State?

(There was a short interruption, after [18] which the taking of the deposition was resumed as follows:)

BY MR. IRVING:

Q Mr. Moore, do you understand the question that I have asked?

A I would like to have it repeated, please.

MR. IRVING: Miss Reporter, will you please repeat the question.

Q (Read by the Reporter.)

MR. SIMS: I again renew my objection. It has not been established that there is any sulfur oxide air pollution in the other areas.

MR. IRVING: I will rephrase my question.

BY MR. IRVING:

Q Mr. Moore, is there sulfur oxide pollution in other urban areas in the State of Illinois?

A Yes.

Q Where it exists, what is the primary source of this pollution in these urban areas?

A With several exceptions, combustion of coal is a primary source of sulfur dioxide.

Q Mr. Moore, does the washing process remove much of the sulfur content of Illinois coal?

MR. SIMS: What type of washing process, [19] counsel?

BY MR. IRVING:

Q Mr. Moore, when I use the term "washing process", are you generally familiar with what I am referring to?

A Yes.

MR. SIMS: I think for the purpose of the record, counsel, you ought to clarify that.

MR. IRVING: Since Mr. Moore is familiar with the term as I used it, I will ask him to answer the question.

MR. SIMS: The Judge might not, though, counsellor. It can be a very confusing record if he does not understand the term.

MR. IRVING: I do not believe that would be the case.

BY MR. IRVING:

Q Mr. Moore, would you please answer the question.

A Would you give me the question again, please?

MR. IRVING: Miss Reporter, will you please read the question.

[20] Q (Read by the Reporter.)

BY THE WITNESS:

A If you refer to washing as meaning removing the surface impurities of coal by one or more means, it does remove the pyritic sulfur content of coal. However, basically, Illinois coal consists of both pyritic and organic sulfur, of which organic sulfur is more pronounced. You cannot make low sulfur coal out of high sulfur coal by washing it, as a general statement.

MR. IRVING: Will you please read back the last sentence of Mr. Moore's answer.

A (Read by the Reporter.)

MR. IRVING: Thank you.

BY MR. IRVING:

Q Mr. Moore, what is the current state of the art in the development of either pre-combustion processes or stack retention processes which minimize the organic sulfur content of high sulfur coal?

MR. SIMS: I am going to have to object, counsellor. I know the witness has some knowledge on this and I

think anybody would who reads publications about it, but we took the deposition, as I said before, of Mr. Middleton and I think [21] he was much more knowledgeable in this area and I do not believe the witness would dispute that Mr. Middleton should know more about the research and development of control techniques than he does.

(There was a short interruption, after which the taking of the deposition was resumed as follows:)

MR. IRVING: The only question you have raised, counsel, is whether or not this witness is qualified to answer this question. On that there can be no dispute and I ask Mr. Moore to please answer the question, if he will.

MR. SIMS: I again object because you have not laid the proper foundation for asking for this information. He has not testified that he is a mechanical or combustion engineer, or that he has any special expertise in the development of these control techniques.

MR. IRVING: I think the record will show Mr. Moore's qualifications, eminent qualifications, and I ask the Reporter to please repeat the question.

Q (Read by the Reporter.)

[22] BY THE WITNESS:

A To my knowledge, there are several pilot plants being operated throughout the United States together with many blueprint ideas concerning the removal of sulfur dioxide from gas streams. One pilot plant is operating in Illinois in this area. It's known as the "red mud process. This is being done under partial Federal funding, as I understand it. Another process, known as the Dolomite Injection Method, is being used by Union Electric over in Meramec—I believe that's the community—in Missouri.

Our Board has had little experience with these plants, since there is only one in existence in this State and we have not had a large input of information concerning these methods.

BY MR. IRVING:

Q Mr. Moore, are you able to predict how long it will be before such a process will be both feasible technologically and practical economically?

MR. SIMS: Objection. This is highly speculative.

BY MR. IRVING:

Q You may answer, Mr. Moore.

[23] A No, I cannot.

Q Would it be accurate to assume, sir, that even when such a process is feasible, there will be some time lag before the process is installed into operation on a large scale?

MR. SIMS: What do you mean by "feasible", counsel?

MR. IRVING: Technologically feasible.

MR. SIMS: I will also object to that as leading the witness.

BY MR. IRVING:

Q You may answer, Mr. Moore.

A It's been our experience as an enforcement agency that there is a large time lag between the development of processes and the actual implementation of them in pollution situations.

Q Can you estimate at this time what the cost of installation and operation of such a process, if and when successful, will be?

MR. SIMS: Objection. That is speculative and you have not laid the foundation for asking him these kinds of opinions.

BY MR. IRVING:

Q You may answer, sir.

[24] A Not at all.

Q Sir, at the present time is the burning of low sulfur coal the only available method of reducing the emission of sulfur oxides from the combustion of coal?

MR. SIMS: Object. That is leading.

BY MR. IRVING:

Q You may answer, sir.

A Yes.

MR. SIMS: Would you repeat the question, please.

Q (Read by the Reporter.)

BY MR. IRVING:

Q Mr. Moore, I believe you testified earlier that you were conducting a survey on the availability of low sulfur coal in Illinois, is that correct?

A That's correct.

Q Does this survey include a study of the transportation cost elements in the marketing of coal?

A Yes.

Q Sir, why have you included such a study of transportation cost factors in this survey?

MR. SIMS: Has it been established that [25] he has included these, that he has drawn up the contract? I mean, I don't know. I am just asking.

MR. IRVING: I think when counsel reads the record he will find that it has been established that Mr. Moore is conducting such a survey.

MR. SIMS: I do not object to that. I am just objecting to his testifying as to why they were put in, because there has been no previous testimony that he has been responsible for drawing up the agreement.

MR. IRVING: I have asked Mr. Moore why such factors were included. If he does not know, I am sure he will state so.

BY MR. IRVING:

Q Mr. Moore, would you like to have the question repeated?

A Yes, please.

MR. IRVING: Miss Reporter, would you please read the question.

Q (Read by the Reporter.)

BY THE WITNESS:

A Because this is a comprehensive study which will help the State agency develop the best [26] use of low

sulfur fuel resources in the State, and transportation is one of the factors we are very much interested in.

BY MR. IRVING:

Q Mr. Moore, in your opinion, will air pollution control regulation cause a shift in the marketing pattern of high sulfur coal?

MR. SIMS: May I have that question read back, please.

Q (Read by the Reporter.)

MR. SIMS: I first object because it is leading, and secondly you did not lay the proper foundation for asking the witness a question as comprehensive as this. It is also speculative.

BY MR. IRVING:

Q Mr. Moore, you may answer.

A It's my opinion that it will.

Q Sir, could you please describe what effect this will cause? What is the nature of the effect that will be caused by this?

A Limiting the sulfur content of certain fuels has already disrupted certain patterns of sales and transportation. It is my understanding that the coal industry is presently reluctant to [27] sign any contracts in the Chicago area for the next heating season because of the limitations placed upon sulfur in coal by the Chicago ordinance.

MR. SIMS: I move to strike that last answer on the grounds of hearsay.

(There was a short interruption, after which the taking of the deposition was resumed as follows:)

BY MR. IRVING:

Q Mr. Moore, in your opinion, is it likely that such regulation will cause a shift in the type of fuels consumed?

MR. SIMS: Objection on the same grounds as I previously stated.

BY MR. IRVING:

Q You may answer, sir.

A By "such regulation", you refer to what?

Q The air pollution control regulations.

MR. SIMS: Could you be more specific than that, counsellor? What particular air pollution control regulations?

MR. IRVING: Referring specifically to the sulfur oxide air pollution control regulations, as we have been referring to through [28] most of this deposition.

MR. SIMS: In the cities of Chicago and St. Louis? I think that is the only testimony as to sulfur oxide legislation.

MR. IRVING: My question is directed to all the areas which the witness has referred to this afternoon.

BY THE WITNESS:

A Could I have the original question back, now?

MR. IRVING: Miss Reporter, would you read back the question, please.

Q (Read by the Reporter.)

BY THE WITNESS:

A Yes. Low sulfur fuels obviously become much more attractive to people, particularly if they are involved in air pollution problems with the State concerning our present regulations, which limit the discharge of particulate matter, becomes attractive to not only solve the particulate problem, but to go one step further looking into the future and use a low sulfur fuel conversion which will get them off the hook for many years to come.

MR. IRVING: Defendant has no further [29] questions at this time.

MR. SIMS: Could we have a five-minute recess?

MR. IRVING: Certainly.

(Whereupon a short recess was taken, after which the taking of the deposition was resumed as follows:)

CROSS EXAMINATION

BY MR. SIMS:

Q Mr. Moore, is it your opinion that the City of St. Louis over-estimated the availability of low sulfur coal at the time they passed their air pollution ordinance?

A Yes, it is.

Q Is it your opinion that the City of Chicago overestimated the availability of low sulfur coal at the time they passed their air pollution ordinance?

A Yes, it is.

Q Regarding the title of your arrangement, I do not know if this was brought out on direct, but who is the company that is conducting this study on low sulfur coal in the State?

MR. IRVING: I will object to that, counsel.

* * *

[39] Q Is it not a fact that a number of combinations of pollution controls can be devised to handle air pollution?

MR. IRVING: What sort of air pollution is counsel speaking of?

MR. SIMS: You have asked him about air pollution in the case in chief, counsellor, using the same term as he understands it.

MR. IRVING: When I so used that term, I did define the nature of the air pollution to which I was referring.

MR. SIMS: Several times you did not, counsellor.

BY MR. SIMS:

Q Would you answer the question, please.

A May I have the question one more time, please.

Q (Read by the Reporter.)

BY THE WITNESS:

A Depending on what contaminant one is speaking of, yes, this is true.

BY MR. SIMS:

Q Do all of the members of your technical staff always agree on what combinations and methods [40] should be used in a particular situation?

A No. Engineers are like lawyers. They don't always agree.

Q You have no way of knowing at the present time, do you, as to what methods will be devised to control sulfur oxides in the State?

MR. IRVING: I will object to that question. Mr.

Moore testified on direct examination that that was his understanding.

MR. SIMS: He remembers what he testified to, counsel. Will you let him answer the question, please.

MR. IRVING: I will restate my objection.

BY THE WITNESS:

A Did you finish that question, or may I have it over again?

MR. SIMS: Miss Reporter, would you read the question back, please.

Q (Read by the Reporter.)

MR. IRVING: This question has been asked and answered on direct examination, and I will restate my objection on that ground.

BY MR. SIMS:

Q Would you answer the question, please, sir.

[41] A A number of methodologies could be developed.

Q But, as of the present time, of course, there is no regulation setting up any methods, is that correct?

A No.

Q At the present time the Illinois Air Pollution Control Board has adopted regulations controlling one pollutant, that of particulate matter, is that not correct?

A They have also adopted regulations pertaining to open burning violations and the quality of smoke as measured by the Ringelmann System which is opacity developed.

Q Have they adopted regulations covering any other pollutants at the present time?

A No.

Q There is technology available for removing particulate matter from fuel gases, is there not?

A Yes, there is.

Q This is utilized by some industrial burners, is this not true?

A That's correct.

Q Do you know from your own knowledge whether these regulations, that is, regulations concerning [42] particulate matter, have affected the fuel consumptions used by cement companies?

A Generally, cement companies have not been prone to convert to other fuels because they don't have the long range sulfur dioxide problem that other industries might have, because their product actually absorbs the SO_2 and is collected mechanically through wet scrubbers or electrostatic precipitators or other known devices.

Q As far as electric utilities are concerned, have particulate matter regulations greatly affected the type of fuels that they use?

MR. IRVING: What does counsel mean by "greatly affected"?

BY MR. SIMS:

Q Would you answer the question, please, sir.

A There have been conversions to gas, generally on older boilers, together with normal attrition and shut-down of older equipment. This is basically to allow the electric utilities to still use coal, but yet meet our emission standards as far as particulates are concerned.

Q Do you have any opinion as to how many tons of coal this will cut out of the electric utility [43] fuel market?

A That would be pure speculation on my part.

Q Would you say it would be minor?

MR. IRVING: I will object to that, counsel. The witness already has indicated that it would be pure speculation on his part to give a value to your question, and on that ground I object.

BY MR. SIMS:

Q Would you answer the question, please.

A I really don't have enough data to give an intelligent answer.

MR. SIMS: All right.

BY MR. SIMS:

Q Let's assume for a moment that standards concerning sulfur oxides are passed for the entire State of Illinois. They will prescribe, will they not, a certain level of air quality and then the methods to be used to obtain the air quality level if it is not already present, is that not true?

A That's essentially true.

Q Do you have any idea about what will be the sulfur oxide air quality standards if they are [44] passed?

A There is a staff recommendation to the Board. This has not been made public yet, and—

Q I do not intend to ask you for specifics, but—

MR. IRVING: Let the witness finish his statement, counsel.

MR. SIMS: Please go ahead.

MR. IRVING: Refrain from interrupting him in the middle of his statements.

BY THE WITNESS:

A (Continuing) —if at all possible, I would be reluctant to state the staff's recommendation to the Board, since our Board has not seen those numbers yet, nor has industry, nor has anyone else.

BY MR. SIMS:

Q Do you know for a fact of any area in the State other than the St. Louis or Chicago air quality control regions that are not presently within the level of air quality recommended by your staff?

MR. IRVING: May I please have that question again, Miss Reporter.

[45] Q (Read by the Reporter.)

BY THE WITNESS:

A Basically, most of the sampling that has been carried on through the State has been particulate sampling, and because of technical problems with the censors, there is not a long history of sulfur dioxide sampling. However, from the sampling that we have done, it would indicate that probably the Quad-Cities area, and by that I mean the Moline-Rock Island area and the Peoria, Illinois area, would more than likely exceed the numbers that we are proposing to the Board.

BY MR. SIMS:

Q Are there any other areas besides these two?

A There are small areas in the State, generally

caused by identifiable point sources, not always related to the combustion of coal.

Q However, is it not a fact that from the data you have collected from these two sources, this data would not be sufficient at the present time to determine for control legislation—strike that.

You stated that the data you have obtained [46] in these areas was mainly concerned with the particulate matter and it indicated that they could exceed the staff sulfur oxide standards, but is it not a fact that you would need additional data before recommending control regulation in these areas?

A That's true, and a telemetry system is being installed in certain portions of the State and money has been allocated to set up a complete telemetry system to sample ten to twelve different parameters at eighteen specific spots in the State, mostly in the standard statistical metropolitan areas, and this would be on-line twenty-four-hour a day sampling.

Q Would the fact that St. Louis and Chicago have been designated as air quality control regions indicate to you that these two areas have the worst levels of air pollution in the State?

A Yes, that's certainly a factor.

(There was a short interruption, after which the taking of the deposition was resumed as follows:)

BY MR. SIMS:

Q Just so I am clear on this point, it is [47] true, is it not, that St. Louis and Chicago are presently exempt from any regulations passed by the State of Illinois Control Board on Air Pollution?

A The area enclosed by the city limits of Chicago is exempt from the Board's actions. However, the State still maintains the overall responsibility, but it's a big brother type of activity, and the other area you referred to, no area in the metroeast area is not within the control of the State. All three counties down there, which are a party to that area, are under State control.

MR. IRVING: I would like to have the answer read back, please.

A (Read by the Reporter.)

BY MR. SIMS:

Q I think you stated that you had no way of knowing at the present time what methods the Board will adopt to prevent, abate or control the sulfur oxide air pollution, but it is set out in the Air Pollution Control Act, is it not, under Section 5, that such methods must be practical and economically feasible?

MR. IRVING: Objection. I object only [48] to your characterization of Mr. Moore's prior testimony. The record, I think, will show exactly what Mr. Moore said in this area.

BY MR. SIMS:

Q Would you answer the question, please.

A May I have the question again, please.

Q (Read by the Reporter.)

BY THE WITNESS:

A Yes. The Act makes those provisions and the Board has been guided by them and must be guided by them, since it is State law.

BY MR. SIMS:

Q It is also provided, is it not, under Section 5 that the Board in making its acts and determinations must take into consideration the social and economic value of the air pollution source, is this not correct?

A Frankly, it's one of the factors that the Act states the Board will take into consideration, but I can't say how much emphasis the Board would place upon any particular—

Q Another factor that the Act sets out must be taken into consideration is the suitability or unsuitability of the air pollution source to the [49] area in which it is located, including the question of priority of location in the area involved, is this not correct?

A That is in the Act, too.

Q Also, that the technical practicality and economic reasonableness of reducing or eliminating the emissions resulting from such air pollution source?

A Yes, that's in the Act.

MR. SIMS: Could we have a five-minute break? Mr. Futterman wants to make a call.

(Whereupon a short recess was taken, after which the taking of the deposition was resumed as follows:)

BY MR. SIMS:

Q Mr. Moore, in stating your opinions on direct, were you speaking as an agent of the Chief Sanitary Engineer, or were these simply your personal opinions?

A Largely they're my personal opinions.

Q Did you claim to have any special influence over any of the nine men on the Air Pollution Control Board?

A Certainly not.

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[3]

EXCERPTS FROM DEPOSITION OF
BERNARD W. SCHOTTERS, TAKEN JUNE 23, 1969

BERNARD W. SCHOTTERS,

called as a witness by the defendants herein, having been by me, the said Claude W. Youker, Jr., as Notary Public aforesaid first duly sworn, was examined upon oral interrogatories and he did thereupon depose and testify as follows:

DIRECT EXAMINATION

BY MR. KEMPF:

Q Please state your name, sir.

A Bernard W. Schotters, S-c-h-o-t-t-e-r-s.

Q What is your home address, Mr. Schotters?

A 737 Kessler Boulevard, West Drive, Indianapolis, Indiana.

Q Are you appearing for your deposition this morning pursuant to a subpoena, Mr. Schotters?

A I am.

Q By whom are you employed?

A I am employed by the Indianapolis Power & Light Company.

Q What is your business address?

A My business address is 25 Monument Circle, [4] Indianapolis, Indiana.

Q How long have you been with Indianapolis Power & Light Company, Mr. Schotters?

A I am completing forty-four years.

Q When did you join the company?

A In 1926.

Q Would you give us a brief description of the types of assignments and responsibilities you have had over the years?

A Well, I started out in the storeroom, and from the storeroom I came in through the Purchasing Department.

I worked there and got some additional schooling and finally wound up on the executive staff level.

Q What is your current position?

A I am President of the company.

Q You mentioned you were in the Purchasing Department.

A Yes.

Q Have you ever had any experience in purchasing coal?

A Yes. All the years I was down there, I was involved with coal purchases.

[5] Q What geographic area does Indianapolis Power & Light Company serve?

A Mainly the County of Marion and approximately one mile to the contiguous county roads in the contiguous counties.

Q Indianapolis is located in Marion County?

A In Marion County, yes. It is located in the center of Marion County, which is the capital of the State.

Q What is the approximate total electrical generating capacity of Indianapolis Power & Light?

A Well, currently it is about 1,103,000, but we are putting in a 450 unit at Petersburg, Indiana, now.

It was scheduled to be in on May 1 of this year, but it looks now like it might be in by, we are hoping, no later than October 1 of this year.

Another 450 megawatt machine has been placed on order and we are under construction now. That will be installed prior to May 1, 1973.

That will give us approximately 1,925,000 kilowatts of capacity generation.

Q What is the primary fuel source used by [6] Indianapolis Power & Light at its electrical generating facilities?

A Coal is the primary fuel.

Q Do you have any other fuels that you use?

A We use some gas and we use some oil. We have some diesels for start-up, which we just installed in the past two years, and then we also have oil for starting our boilers, and also in cases when we bring the boiler down, so that there is no question of the instability of the boiler coming on down, so we do throw the oil in just to bring the boiler on down to the point where we can take the turbines off the line.

Q You said you had purchased some diesel power generators in the last couple of years. How many of those have you purchased?

A There are five.

Q Where does Indianapolis Power & Light Company secure its coal?

A From the southern fields in Indiana and some of the western fields there to the south of Terre Haute.

There are a couple of mines over there at Brazil, south and east of Terre Haute.

[7] Q Has Indianapolis Power and Light ever purchased coal from mines located in Illinois?

A Not to my knowledge; not since 1926, since I have been here.

Q Why has Indianapolis Power & Light confined its purchases of coal to Indiana?

A Well, the coal fields are here, we are centrally located, and with the distance that the coal fields are to our plants, it is just economical that we buy it from the fields adjoining us.

Q What is the economic factor which leads to that?

A It is a question of freight. It is quite expensive to haul this coal from the various mines, and naturally, the closer the mines to your so-called power production plants, the cheaper the freight rate and the less costly it is from the standpoint of operation.

Q Have you ever considered the possibility of purchasing coal from such areas as Fulton County or Belleville, Illinois?

A No, sir.

Q Why wouldn't you consider that?

A I think it is too far away. We have [8] never purchased Illinois coal, and I think the cost of transporting the coal from those fields here would just be prohibitive.

Q Does Indianapolis Power & Light require that the coal which it purchases meet certain specifications?

A Oh, yes. It has to be a certain BTU quality, and also as far as the moisture is concerned, the ash content, the fusion temperatures and the grindability.

All of those factors are taken into consideration in the purchase of coal, particularly when you design a new plant and get your coal supply for it.

Q Does the type of coal which you use vary from facility to facility?

A Oh, yes. Some of it is raw, some of it is washed, some of it has different BTU content and different grindability factors.

Q Are there any situations where coal used at one facility would not be acceptable for use at another facility?

A Yes. At our Petersburg plant, that plant was designed and constructed to use strictly raw [9] coal. We do burn washed coal in it now.

However, at the other plants in Indianapolis, and that includes our Stout plant and even our Pritchard plant and our C. C. Perry plant, sections K and W, those have to have washed coal. They are not designed to burn raw coal.

Q Would there be any situations where different types of equipment within a single plant would require different types of coal?

A Yes. At our Perry plant we have some boilers that have what we call powdered mill zone that burn powdered fuel, while we have other boilers that are chain grate stokers, so those are two different types of fuels that we use there, or we get a fuel that is comparable, that we can use in both.

Q In determining what fuel to burn at your various facilities, does Indianapolis Power & Light consider alternatives to coal?

A Yes. Just recently the Gas Company wanted to know if we would be interested in coal, but the price they wanted to make us per million BTU was entirely too high.

Q Excuse me.

[10] A Yes.

Q You said that the Gas Company was interested in determining if you wanted to use coal?

A No. Yes. I am sorry.

Q All right.

A They wanted to know if we were interested in using gas, and the price they offered per million BTU was in excess of what we are paying now.

As far as oil is concerned, oil is more costly than coal in our operation. We have checked nuclear, we have watched it and we are interested in it, but there again the cost of nuclear, including the fuel as well as the cost of the facilities themselves, is greater than fossil fuels, as far as we are concerned at this point.

Q Is Indianapolis Power & Light participating in any programs designed to improve the economic attractiveness of alternative fuels in the future?

A Yes. We are a member of the Edison Electric Institute and we are taking part in their research program with respect to nuclear.

We also belong to the Atomic Power Development Forum. We were part of the contributors and interested in the engineering for the plant that [11] went up in Michigan. That is the A.P.D.A. plant.

We are interested in an organization called the East Central Nuclear Group, and we have studied magnetohydrodynamics, we have studied gas cool, and currently we are in a research program now with, I think, Gulf Atomics on the West Coast with respect to a fast breeder using gas as the coolant.

Q Have you personally participated in some of the activities of these various forums?

A I have attended some forums. I just attended one, the Edison Electric Institute national convention at Portland, Oregon, two weeks ago, and Dr. Seaborg was there, and he gave us a talk with respect to the future of atomic energy development, and indicated at that time that he felt that by 1980 atomic energy would be the source of generation for at least the base load of the electric utility industry.

Q Was this in the midwest?

A No. I think that was nationally. He was speaking from the national viewpoint.

Q I see. Does Indianapolis Power & Light purchase the coal which it uses pursuant to long- [12] term contracts?

A Yes.

Q Of how long duration are those contracts?

A Well, our longest contract is with Peabody Coal at this moment, and the base contract is for 30,000,000 tons.

However, the value of that contract, from a tonnage viewpoint, is equal, pretty close, to between fifty and fifty-five million tons, and that is normally, I would say, a thirty to thirty-five year coal supply.

Q Do you require that producers have this capability in entering into contracts with you?

A Yes. When you put these large units in, you have to be able to assure the coal supply for it, and normally you do not try to get it for less than thirty years from the standpoint of the supply.

Q Does Indianapolis Power & Light own any coal reserves of its own?

A Yes. We have some coal reserves in Pike and Gibson counties.

That is deep vein coal, so it would have to be mined by the underground mining system and not by strip mining.

[13] Q When were these acquired?

A Oh, I would say sometime in the mid-1930's.

Q Approximately how many tons would you estimate?

A Well, the geologists, on the survey that was made, indicated that there were approximately 30,000,000 tons of coal.

Q Do you have any plans to mine this coal?

A No, not at this time.

Q Would you be able to mine the coal yourself?

A No. If we wanted to open up that field for our own consumption, I think we would ask somebody who is in the underground mining operations to give us a quotation. We do not have the technology to operate and mine coal.

Q Does the electricity generated by Indianapolis Power & Light compete with other fuels such as oil and gas at the consumer level?

A Oh, yes. As far as gas is concerned, that is one of our strongest competitors, first of all, in home heating

for the wintertime, whereas we are selling all-electric living, and even in the [14] summertime they have gone to gas absorption units, and we have the same thing as far as the oil companies are concerned with respect to oil heating in the wintertime.

The Gas Company here is a non-profit organization and their gas rates here are a little lower than they are in other parts of the country. By virtue of that fact, they are very much a competitor of ours. It really is a charitable trust for the benefit of all the citizens of Indianapolis, is what it is.

Q Is that by choice or by circumstance?

A This is by circumstance, back in the 1930's, during the depression, when the bondholders got together and finally decided to put several gas companies together here.

Q Are fuel costs a major item of expenditure for electric utilities?

A Yes. I would say our fuel is running pretty close to 18 or 19 per cent of our total gross revenue dollar.

Q As compared to other expenditures, how does it stack up?

A Taxes are No. 1, and then labor. The [15] three major parts of our cost of operation are fuel, labor and taxes.

Q Is air pollution a matter of concern to Indianapolis Power & Light?

A Yes. It has been. We have been involved in air pollution since 1937, when we installed the first dust collectors at our plants.

Last year we spent right at a million dollars installing additional and new types of dust collectors at our plants.

Q What about sulfur dioxide?

A Well, at the present time, as far as sulfur dioxide, we have not found any system which would help alleviate the situation.

I think Monsanto is working on one. I know that Combustion Engineering are working on a scrubbing deal with Union Electric, and they are having problems in the operation of that; it has not been a hundred per

cent successful, and I think it is still in the experimental stage.

Now, whether somebody will develop something to assist in the alleviation of the sulfur dioxide from the gas, I do not know.

Q Is it possible that air pollution restric- [16] tions might affect your fuel buying pattern in the future?

A Yes. If they prohibit the use of sulfur coal, as I have seen some comment in various articles, less than 1 per cent sulfur coal, I do not think we have any less than 1 per cent sulfur coal in Indiana, and I do not know where less than 1 per cent sulfur coal is in this country, really.

Q Has the advent of the unit train benefited Indianapolis Power & Light in its coal purchases?

A Yes. The volume rate or unit train rate has permitted a reduction in costs as far as transportation is concerned.

Q Where unit trains are available to two mines and two different distances from one of Indianapolis Power & Light's facilities, will the unit train be of any competitive advantage to the more distant mine in helping to serve your business?

A No. I think it is all relative. I mean, as far as the unit train is concerned, the cost for the short distance would be just as much smaller as [17] the mine which was the farthest distance would have to be greater.

I think it is pretty much of a washout as far as the economics are concerned between them, if you have unit trains for both.

Q How would you characterize the degree of competition at the present time within the coal industry for your business?

A Well, I think it is quite active. I think we have as much competition today for our coal supply as we ever had.

Q Has the fact that both United Electric and Freeman been controlled by General Dynamics had any adverse effect on Indianapolis Power & Light?

A Not to my knowledge, no, sir.

Q Why would that be?

A Well, they are not within our area which we consider as economically feasible for the purchase of coal.

Q Will there be any adverse effect on Indianapolis Power & Light Company if General Dynamics is allowed to continue owning both Freeman and UEC?

[18] A No.

Q Would there be any benefit to Indianapolis Power & Light by forcing Freeman and United Electric to operate independently of each other?

A Not as far as we are concerned, no.

MR. KEMPF: I have no further questions.

MR. FUTTERMAN: May we have a short recess, please.

(Whereupon a short recess was taken, after which the taking of the deposition was resumed as follows:)

MR. FUTTERMAN: On the record.

CROSS EXAMINATION

BY MR. FUTTERMAN:

Q Mr. Schotters, what percentage of the fuel used to generate electricity in your system is coal?

A I would say 98½ or 99 per cent. The only reason we use oil at all is just to start the boilers off. If you bring the boiler up, you bring it up with oil rather than a powdered fuel, and without a flameout, and once you get a good fire in your boiler, then your oil goes out.

* * *

[26] Q Mr. Schotters, you have no knowledge, [27] do you, of where United Electric or Freeman might locate a mine at some future date?

A No, sir.

Q And you would not know whether or not in the future either of those companies might locate a mine which would be in a position to serve one of your plants?

A I do not.

Q Mr. Schotters, you testified on direct examination, I believe, that you were in the Coal Purchasing Department of Indianapolis Power & Light.

A In the Purchasing Department, which bought all the supplies of coal.

Q When you were holding that position, did the suppliers of coal call on you and propose to sell coal to your company?

A Right.

Q Did you have knowledge of the types of mines that they were operating at that time?

A Yes.

Q In regard to strip mines, did you have a knowledge as to the depth at which the companies were stripping?

[28] A I would say forty to fifty feet overburden was perhaps the tops that they were removing at that time.

Q Was this in the 1930's?

A Back in the 1930's.

Q The '30's and '40's?

A And late '20's.

Q Was there any reason to believe at that time that stripping would exceed forty or fifty feet?

MR. KEMPF: I am going to object at this point to this line of inquiry as beyond the scope of the direct examination.

MR. FUTTERMAN: You may answer the question.

THE WITNESS: Would you repeat the question for me, please?

MR. FUTTERMAN: Read the question, please, Mr. Youker.

Q (Read by the Reporter.)

BY THE WITNESS:

A I would say no, to start with. However, due to the advent of World War II and the ability of not only the Government, but also of manufac- [29] turers in general to increase the size of equipment, this brought about the ability of this large earthmoving equipment, and this is when they started to develop a larger size equipment for the coal mining industry.

BY MR. FUTTERMAN:

Q Is it not a fact that stripping occurs at depths in excess of 100 feet in the midwest today?

A In the midwest, I cannot answer. In Indiana, I would say 110 feet is tops, maximum?

Q Mr. Schotters, would you tell us what the major factors are when you consider where to locate a coal generating station?

A The major factors are water and coal supply as well as the ability to transmit the power generated to the center of your load system.

Q Is it not true that high voltage transmission lines have reduced transmission costs?

A Yes.

Q Assuming proper load capacity going across these lines, is it more economical to have these extra high voltage lines?

A Yes.

[30] Q Has the development of high voltage transmission enabled you to consider plant locations previously thought to be too far from distribution centers?

A The answer to that is really no, for the simple reason that at the time we were installing our Stout plant, as well as our Petersburg plant, our load growth or our demand had not exceeded the point where we could not transmit it with 138,000 volt transmission lines, but as the load continues to grow, you naturally have to be able to develop your lines, and you are able to go into larger units, from a 100 MW unit to a 250 MW unit and now to a 450 MW unit, so naturally it behooves us to get closer to the coal fields, as far as water is concerned, and then the question of the transmission, and we are transmitting now 345,000 volts.

Q Mr. Schotters, in the future, if you are to locate your plants away from the municipal areas within your distributing area, wouldn't that alleviate certain municipal air pollution problems?

A No. Air pollution will be, I am quite sure, a state statute or a federal regulation, regardless of where you put it. You can put it [31] in Timbuktu.

Q Is it not a fact, Mr. Schotters, that the air pollution legislation will be concerned with the quality of the air?

A Yes.

Q And is it not a fact that the quality of the air in outlying areas is likely to be better than the quality of the air in municipal areas?

A I think the regulations are going to provide that these test spots will be made within a certain location from the plant site, and regardless of the purity of the air, they are going to hold you within certain restrictions as to the amount of gas as well as contaminants that come from the top of that stack.

Q Mr. Schotters, do you know this for a fact?

A Yes. I think I read a report with respect to the rules and regulations that are being adopted in Chicago.

Q Have any of these regulations been adopted in the State of Indiana?

A Have they?

.

[34] BY MR. FUTTERMAN:

Q Mr. Schotters, is it not a fact that the presence of coal deposits in Illinois and West Kentucky serves as a restraint on the prices that Indiana coal producers can charge electric utilities in Indiana?

A I do not think so.

Q Well, is it not true that if the price of coal in Indiana were raised to certain levels that it might enable you to begin purchasing coal more economically from producers in Illinois or West Kentucky?

A You have a freight problem here and I think your cost of transportation would more than offset any reduction in price which they could make.

Q Well, would the freight cost from eastern Illinois, if coal were available in that part of the state, be much greater than the freight cost from the western coal fields of Indiana?

[35] A I would say the single car tariff would be 25 to 30 per cent higher.

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[39] REDIRECT EXAMINATION

BY MR. KEMPF:

Q During your cross examination by Mr. Futterman, you stated that approximately 98 per cent or more of your fuel requirements are supplied by coal at the present time.

A Yes.

Q In making your fuel procurement decisions, do you continue to compare the costs of alternative fuels such as gas, oil and nuclear?

A Yes.

Q Will you continue to do so in the future?

A Yes. That decision must be made before you really determine whether you are going to go into a fossil fired fuel generating station.

Q Mr. Futterman also asked you some hypothetical questions based on certain assumptions concerning coal reserves.

Do you know whether there are any fields of strip reserves not controlled by present producers and which are recoverable at or near present mining costs, which are available for acquisition at [40] the present time?

A No. I do not know of any.

Q Do you know it to be a fact that there are no such fields available?

A Well, I would say this: If they are, they have not been located, so they are not a field at this time. All the fields of recoverable reserves in the State of Indiana are all now designated and located.

Q Have you ever operated a strip mine, Mr. Schotters?

A No.

Q Do you consider yourself an expert in strip mining technology?

A No.

MR. KEMPF: I have no further questions.

RECROSS EXAMINATION

BY MR. FUTTERMAN:

Q Mr. Schotters, you stated that all recoverable fields in Indiana are located. Do you mean strip reserves or underground reserves or both?

A I would say both, to the best of my knowledge.

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[3]

EXCERPTS FROM DEPOSITION OF
LEROY M. ABRAHAMSON, TAKEN JUNE 26, 1969

* * * *

MR. HEDLUND: Will you swear Mr. Abrahamson, please, Mr. Youker.

(The witness was thereupon duly sworn.)

MR. HEDLUND: Mr. Abrahamson, in the event I ask you a question which you do not understand, or Mr. Cusack asks you a question which you do not understand, please feel free to say that so that we can rephrase it and make it more meaningful.

Also, if during my questioning or that of Mr. Cusack I inadvertently interrupt you in an answer that you have not finished, please bring that to our attention so that we can get a full and complete answer from you.

LEROY M. ABRAHAMSON,

called as a witness by the defendants herein, having been by me, the said Claude W. Youker, Jr., as Notary Public aforesaid first duly sworn, was examined upon oral interrogatories and he did thereupon depose and testify as follows:

DIRECT EXAMINATION

BY MR. HEDLUND:

Q Would you please state your name and present occupation.

A Leroy M. Abrahamson, Manager of Power [4] Production, Wisconsin Power & Light Company.

Q Are you appearing at this deposition pursuant to a subpoena served upon you?

A Yes, I am.

Q Could you briefly describe your educational and business background.

A I graduated from the University of Minnesota with the degree of Bachelor of Electrical Engineering in June of 1929.

I have worked for the Wisconsin Power & Light Company since October of 1929, in various capacities, from power plant electrician to manager of two different power plants. For the past sixteen years I have occupied my present position.

Q Could you tell us generally what your responsibilities are as Power Production Manager?

A The Power Production Department has supervision over the design, the construction, the operation and the maintenance of all of the company's power plants, including the hydro plants as well as the steam plants.

Q To what extent have you, in recent years, been involved in coal purchasing, negotiations for coal contracts and the administration of those [5] contracts?

A For the past sixteen years I have helped negotiate every coal contract.

Q That is, every coal contract of Wisconsin Power & Light Company?

A Yes, in conjunction, of course, with our Purchasing Department.

Q Could you please describe the service area of Wisconsin Power & Light Company?

A We serve the South Central portion of Wisconsin, from the Illinois state line up north as far as Tomah and Clintonville in Wisconsin.

We serve Sheboygan on Lake Michigan, over to the Mississippi River, the area over to the Mississippi River.

Q Is it fair to say that Wisconsin Power & Light serves approximately one-third of the geographic area of the State of Wisconsin?

A We serve about one-third of the area. We do not, of course, serve one-third of the population—

Q I understand.

A —because of Milwaukee, and so forth.

Q How does Wisconsin Power & Light rank [6] among the utilities in Wisconsin in total generating capacity?

A We are the second largest.

Q Is Wisconsin Power & Light an investor-owned utility?

A Yes, it is.

Q I wonder if you could describe the generating facilities of Wisconsin Power & Light, and as to those that consume coal, from whom coal is purchased for those stations. Perhaps it would be easier to start with your Edgewater plant.

A Well, at Edgewater station we have an installed capacity of about 130 megawatts. That capacity is in three units.

Coal for Edgewater is purchased from the C. Reiss Coal Company.

Q Do you know where—I am sorry.

A The coal comes from Peabody Coal Company.

Q All right.

A We burn practically all West Kentucky, either No. 9 or No. 11 coal, except that last year he had to burn some eastern coal because of the Belt Line Railroad strike in Chicago.

[7] Q Had you ever burned eastern coal before?

A Yes, sir. Up until about fifteen years ago we burned all eastern coal at that station.

Q Where is the Edgewater plant located?

A It is located on the south side of the city of Sheboygan.

Q Sheboygan is located on the western shore of Lake Michigan?

A That is correct.

Q With reference to the coal that you purchased for Edgewater, how is that coal delivered?

A The coal comes from the mines in West Kentucky through the Rail-to-Water facility in Chicago. It is dumped in boats, hauled to the C. Reiss dock, and then it is trucked out to Edgewater as we consume it.

Q Are your contracts for the purchase of that coal directly with C. Reiss Coal Company?

A Yes, they are. They are one-year contracts.

Q Why do you purchase your coal directly from C. Reiss Coal Company rather than, say, directly from a producer?

A C. Reiss Coal Company have room on their [8] dock to store this coal. They own the coal until it is delivered to our plant.

Q Approximately how many tons of coal a year do the three units at Edgewater consume?

A Approximately 275,000 tons a year.

Q Why have you confined your purchases at Edgewater in the past to coal from West Kentucky, or to use the recent example, to coal produced in the eastern section of the country?

A The older units at Edgewater, the first of which was installed in 1931, were designed for high BTU coal out of the east. With the lower BTU coal we could not get full capacity out of these units.

Q Is West Kentucky coal, or the West Kentucky coal which you are consuming there, a high BTU coal?

A It is high BTU compared with Belleville or Fulton County coal.

Q You have under consideration, do you not, at Edgewater, a new generating facility?

A Yes. We are presently constructing a 330 megawatt coal-fired unit.

Q When that construction is completed and the plant is on line, will you continue to use the [9] existing units at Edgewater?

A They will continue to be used but to a lesser extent than they are being used today.

Q Is it likely that at some near future time these units will be closed?

A The two 30 megawatt units will be the first to be retired in our company.

Q Of all your generating stations, how does Edgewater presently rank in terms of fuel costs?

A Edgewater has the highest fuel cost of any of our stations.

Q Could you briefly describe, or generally describe your generating station which is called, I believe, Nelson Dewey?

A Nelson Dewey Station is located on the Mississippi River at Cassville, Wisconsin. It has two units and a total capacity of 220 megawatts.

Q Does this plant consume coal?

A The plant does consume coal. It come from the Belleville District of Illinois, some 640,000 tons per year.

It is loaded in barges at either East St. Louis of the Kellogg dock in Illinois, barged [10] up to Cassville, and there we unload it to our own pile. We have no facilities for receiving rail coal at this plant.

Q Is the coal for Nelson Dewey purchased on an annual basis such as at Edgewater, or on long-term contracts?

A Coal for Nelson Dewey is purchased on long-term contracts. We have three suppliers there. As to two of the suppliers, the contract extends until 1976, and with respect to the other supplier, until 1978.

Q Through the year 1976, then, what per cent of your long-term coal contract commitments have you completed? That is, what per cent of your long-term contract coal commitments through the year 1976 have been satisfied?

A I don't understand the question.

MR. HEDLUND: Let me try to rephrase it, then.

BY MR. HEDLUND:

Q Is it not a fact that you have entered into contracts for all of your long-term contract coal commitments for Nelson Dewey through the year 1976?

[11] A That is true.

Q With respect to the two contracts you mentioned that run through the year 1976, do you have an option to renew either of those contracts?

A Yes. We have an option to renew one of them for ten years.

Q Why have you not purchased coal for Nelson Dewey from mines located other than in the Belleville District?

A All of our studies have shown that it is more economical to use Belleville District coal.

Q Could you describe the other two coal burning stations that you presently operate?

A About five miles north of Beloit, located on the Rock River, we have our Rock River generating station.

It is a two-unit plant with a total capacity of 160 megawatts. All of the—

Q Approximately—I am sorry. Continue.

A All of the coal for Rock River is all rail from the mine to the plant. We normally would burn only West Kentucky or Southern Illinois coal, because of its higher BTU rating.

In the past year, with coal in short supply, [12] we have burned some coal from the Belleville District and some from Wilmington, and some from Fulton County.

Q Has that coal been supplied from mines owned by the companies with whom you had contracted for West Kentucky or Southern Illinois coal?

A Most of the coal comes from the Peabody Coal Company with whom we have a long-term contract. We have made yearly contracts with two other suppliers.

Our Black Hawk Station is located in the city of Beloit, also on the Rock River. This is all rail coal again, normally from West Kentucky.

However, at this station we do have one boiler in which we burn interruptible gas. In 1968, 57 per cent of the production at Black Hawk was by gas and the balance was coal. The size of the station is 58 megawatts.

Q That is in Beloit, is it?

A Right in the city of Beloit, yes.

Q Do you have any present plans for increasing your gas consumption at Black Hawk?

A Yes. At the present time we are installing gas burners in the second boiler at Beloit.

Q When the conversion is completed, approxi- [13] mately what per cent of the electrical generation at Black Hawk will be gas—let me rephrase that question.

When this conversion is completed, what per cent of the fuel consumed at Black Hawk will be natural gas?

A It will be approximately 80 to 85 per cent gas.

Q Could you tell me some of the factors that entered into the decision by Wisconsin Power & Light to convert the remaining units at Black Hawk to natural gas?

A We are a combination company, that is, we sell both electricity and gas. Our gas loads have been increasing steadily, and as a result we have had to buy larger quantities of gas; we had to contract for a larger demand.

We use that for our customers during the cold months

and burn a portion of the remaining gas for generating electricity.

Q Are there any other factors involved in your decision to convert the remaining unit?

A Yes. It was more economical to burn the gas.

[14] Q Was air pollution considerations a factor?

A Yes. We are directly across the street from Beloit College.

Q Have they been giving you a lot of problems with respect to air pollution?

A No, they have not.

Q Not yet?

A No.

Q Do you operate any hydroelectric plants in the system?

A Yes. We own and operate two hydroelectric plants, a 30 megawatt plant on the Wisconsin River at Prairie Du Sac and a 10 megawatt plant at Wisconsin Dells.

In addition to this, we are part owners of the Wisconsin River Power Company, who operate the Castle Rock and Petteenwell plants, and we receive 12 megawatts of power from those two plants.

Q You have mentioned, now, Edgewater, Nelson Dewey, Black Hawk, Rock River and your hydroelectric plants. Do you have any other generating facilities presently being operated?

A Yes, we do. We have two gas-fired turbine generator peaking units. One of these is located [15] directly at the Rock River plant, and is a nominal 30 megawatt unit.

The second gas turbine is located about a mile from Rock River, and that is a nominal 17 megawatt unit.

Q I wish to return for one moment to the Rock River plant. Approximately what per cent of the coal burned at that plant is pursuant to the one long-term contract that you mentioned? Can you give it to me just roughly?

A I would have to answer that in two ways. For the coming year we are burning somewhat less coal under the long-term contract. It will be about 60 per cent under the long-term contract for the year 1969.

Q In prior years, approximately what per cent was it?

A In prior years it was closer to 90 per cent.

Q Do you expect that your 60 per cent level will be maintained over the next several years, or do you know?

A I do not know.

Q How long is the term of that contract?

[16] A Until 1976.

Q How long in duration will that contract then have been in effect?

A Twenty years.

Q Do you presently have under construction any new generating capacity?

A As I mentioned before, we are installing a 330 megawatt unit at Edgewater. This is a coal-fired unit. It is scheduled for completion by December of 1969.

Q How will that unit compare to other generating facilities in the State of Wisconsin when completed?

A It will be the largest unit in the State of Wisconsin. Coal for the unit will be supplied by unit train.

Originally the coal will come from Fulton County, from one coal supplier and over one railroad. The Wisconsin Power & Light Company and the Wisconsin Public Service Corporation will own the coal cars.

Edgewater Unit No. 4 will be owned 31.8 per cent by Wisconsin Public Service Corporation.

MR. CUSACK: And the remainder by your [17] company, do you mean?

BY THE WITNESS:

A And the balance by Wisconsin Power & Light Company.

MR. CUSACK: Thank you.

BY MR. HEDLUND:

Q With whom was the coal contract for this plant negotiated?

A The Peabody Coal Company.

Q Were you directly involved in those negotiations?

A Yes, I was.

Q Did you have ultimate responsibility for that contract?

A (No answer.)

Q I am talking about ultimate working responsibility. Undoubtedly board approval or top executive approval, chief executive approval, may have been necessary, but were you the principal?

A There were two of us that were involved, the Manager of Purchases and Stores and myself.

Q The Manager of Purchases and Stores of Wisconsin Power & Light Company?

A Of Wisconsin Power & Light Company, yes.

[18] Q Who will own the cars used in that unit train?

A They will be owned jointly by Wisconsin Power & Light Company and Wisconsin Public Service Corporation.

Q Approximately how much is each one of those cars going to cost?

A Each car will cost just over \$16,000.

Q Why did you decide to purchase coal for this new plant under one single contract?

A Because of the tonnage involved and the equipment that is necessary at the mine, it would be practically impossible to have more than one supplier.

Q Having one supplier, did this give you any advantage as far as transportation costs are concerned?

A Very definitely.

Q Why was that?

A Because this unit train will make better utilization of the coal cars and engines that pull the train than would be the normal railroad service.

Q I did not ask you what the term of this contract is.

[19] A This contract is for fifteen years with a ten year option.

Q Beyond the fifteen?

A Beyond the fifteen.

Q Up to how many tons of coal per year will be shipped under this contract?

A Up to 1,000,000 tons of coal.

Q In planning for the coal supply for this generating station did you give consideration to the United Electric Coal Companies as a supplier?

A No, we did not, mainly because they did not convince us that they had adequate reserves. We did give consideration to many coal companies.

Q Speaking in terms of reserves, what was the total amount of reserves or of a reserve commitment that you were looking for?

A We were looking for around 25,000,000 tons.

Q Do you have any other generating facilities presently under construction?

A Yes. Together with Wisconsin Public Service Corporation and Madison Gas & Electric, we are constructing a 527 megawatt generating unit at Kewaunee, Wisconsin. This will be a [20] nuclear station.

Q Approximately when do you expect that plant to be completed?

A That plant should be completed late in 1972. We will own 41 per cent of the plant.

MR. HEDLUND: Mr. Youker, will you mark as Abrahamson Deposition Exhibits 1 and 1-A the front cover and its back page of the 1967 Annual Report of Wisconsin Power & Light Company, and having done so, would you hand it to the witness, and for purposes of minimizing the number of documents in this case, I am physically going to remove this cover page.

MR. CUSACK: May I see the exhibit, please?

MR. HEDLUND: Certainly.

(The front and back sides of the document were thereupon marked respectively Abrahamson Deposition Exhibits 1 and 1-A, for identification 6-26-69.)

(There was a short interruption, after which the taking of the deposition was resumed as follows:)

[21] MR. CUSACK: Mr. Hedlund, will you furnish us with a copy of this, as we do not have a copy of it and have not seen it before.

MR. HEDLUND: I do not intend to ask Mr. Abrahamson anything other than the following question with respect to this document:

BY MR. HEDLUND:

Q Is that document the document that I have described?

A Yes, it is.

MR. HEDLUND: Let the record show that I am giving the original copy of the exhibit to Mr. Cusack so that he can make a copy.

MR. CUSACK: Very well.

BY MR. HEDLUND:

Q Mr. Abrahamson, does Wisconsin Power & Light have under consideration at the present time the construction of any additional generating capacity?

A Yes. We now have a study under way looking toward the construction of about a 500 megawatt station to be in operation early in 1975.

The decision has not been made as to [22] whether this will be a fossil fuel or a nuclear station, although it tends toward the fossil fuel.

Q In that connection, Mr. Carl J. Forsberg—who is, is he not, Chairman of the Board of Wisconsin Power & Light Company?

A That is correct.

Q (Continuing) —testified before the Interstate Commerce Commission in Finance Dockets Nos. 24182, et al., being a proceeding involving the proposed merger of the Chicago, Milwaukee & St. Paul Railroad with the Chicago and North Western Railway, and I am informed made the following statement:

“The economy of rail transportation in turn will have a further direct relationship upon our future decision to utilize coal in the use of steam generation as against nuclear generation.”

Whether or not Mr. Forsberg did actually so testify, would you agree with that statement?

A I would agree with that statement.

Q Now, with respect to this additional generating capacity that you have under study, have you had any conversations with coal suppliers with [23] respect to

supplying coal to the station if you ultimately decided that it is to be coal-fired?

A Yes. We have had preliminary reports from five or six coal suppliers.

Q What sort of contractual commitment have you indicated to these suppliers that you have in mind?

A We have indicated to these suppliers that we would like to have a twenty year contract with two five-year additional options to renew.

Q What would be the approximate tonnage per year under this contract?

A For the first five years it would be about a million and a half tons. When it is decided to install the second unit, use would increase to approximately three million tons per year.

Q How would you contemplate receiving this coal?

A By unit train.

Q Do you contemplate entering into a contract with just one producer?

A That is our present thinking.

Q In the course of these preliminary discussions with coal suppliers, did you have any discussion with United Electric Coal Companies, or a representative of the United Electroal Coal Companies?

A Yes, we did. In fact, we received a proposal from Ed Butler of the United Electric Coal Companies.

Q What position does Mr. Butler have with United Electric Coal Companies?

A He is the salesman who calls on our company.

Q Could you tell us about the proposal made to you by Mr. Butler? By the way, when was this proposal?

A In December of 1968.

Q I am sorry to have interrupted. Could you tell us of the proposal by Mr. Butler?

A The proposal, which was rather preliminary, was that he proposed to sell us coal from the Springfield District of Illinois, from property presently owned by the Freeman Coal Mining Company.

Q Was that to be out of an existing mine or a new mine?

A That would be from a new underground mine.

[25] Q What was your reaction to this proposal?

A We looked upon it favorably.

Q Are you at the same time still considering proposals from other companies?

A Very definitely.

Q Was there any transportation aspect of Mr. Butler's proposal that was of interest?

A Yes. The fact that this coal mine could be located on the Chicago and North Western Railroad and one of the two plant sites that we have is on the Chicago and North Western Railroad would make it a one-line haul, and that would make it definitely attractive to us.

The other site that we have is on the Milwaukee Road. With the proposed merger of the two railroads, it would again make it a one-railroad haul.

Q Did any of the other coal producers with whom you had these preliminary discussions indicate an ability or willingness to open up a new strip mine to provide this tonnage?

A No one offered us coal from a strip mine.

Q In considering Mr. Butler's proposal, were you troubled at all by United Electric's lack of [26] experience in deep mining?

MR. CUSACK: Objection. It is a leading question. I move to strike.

MR. HEDLUND: You may answer.

BY THE WITNESS:

A In my personal opinion—would you repeat the question, please?

MR. HEDLUND: Will you read the question, please, Mr. Youker.

Q (Read by the Reporter.)

MR. CUSACK: I would like to point out for the record that Mr. Butler's proposal, according to the witness' testimony, was about a Freeman mine. He said nothing about a United Electric mine.

MR. HEDLUND: Mr. Abrahamson talked about Freeman property. You may answer, now, if you understand the question.

BY THE WITNESS:

A No. I was not concerned.

BY MR. HEDLUND:

Q Why was that?

A Because Freeman operates underground mines.

[27] Q If United Electric were independent and came to you with a proposal to open a deep mine in order to serve this facility under the contract that you have in mind and it were the fact that United Electric did not at that time nor had it in the past any deep mining experience or know-how or organization, would that have been of concern to you?

A Personally it would be of concern to me and I would investigate very thoroughly their ability to operate this mine before advising our company to enter into a contract with United Electric.

Q Why would you investigate their ability to open a deep mine? Why is that a consideration?

A Because United Electric has mainly been—has always been a strip mining company.

Q Can you tell me, Mr. Abrahamson, at the present time what per cent of your generating capacity is coal-fired, what percentage natural gas and what percentage hydroelectric?

A Let us use the kilowatt hour requirements for the year 1968.

Q All right.

A 89 per cent of the electricity was produced [28] by coal, 5 per cent by gas and 6 per cent by hydro. I may have the 5 and 6 reversed.

MR. CUSACK: No, you don't.

THE WITNESS: All right.

BY MR. HEDLUND:

Q Upon completion of the Kewaunee station, what per cent of your generating capacity, approximately, will be coal?

A Approximately 80 per cent.

Q Do you believe that coal competes with other fuels in the utility market, or other sources of energy?

A Very definitely. That is why we are studying the proposition now, should the new station be nuclear or coal-fired.

Q In your opinion, Mr. Abrahamson, based upon your experience and knowledge, has the common ownership of Freeman and United Electric had any adverse effect on Wisconsin Power & Light?

A In my opinion, no, it has not.

Q In your opinion, would there be any benefit to Wisconsin Power & Light if General Dynamics were divested of its ownership of United Electric?

[29] A No, not in my opinion.

MR. HEDLUND: May I have the last question and answer again, please, Mr. Youker.

(The record was thereupon read by the Reporter as above recorded.)

BY MR. HEDLUND:

Q In your opinion, might there be a benefit to Wisconsin Power & Light if the common ownership of these two companies were permitted to continue?

A It could be a benefit to Wisconsin Power & Light if we would sign a contract for coal from the Springfield property.

MR. HEDLUND: You may inquire, Mr. Cusack.

CROSS EXAMINATION

BY MR. CUSACK:

Q Mr. Abrahamson, in regard to your Edgewater Generating plant, you said, did you not, that at one time all of the coal purchased for the Edgewater plant was eastern coal? Is that correct?

A That is correct.

Q When was the last year that all the coal purchased for Edgewater was eastern coal?

A It was approximately fifteen years ago.

* * * *

[34] Q Did anyone at United Electric state to you [35] that he thought that you would be able to get some coal from the Banner mine?

MR. HEDLUND: It has been asked and answered. I object to it on that basis.

THE WITNESS: May I have the question back, please?

MR. CUSACK: Read the question, please, Mr. Youker.

Q (Read by the Reporter.)

BY THE WITNESS:

A No. No one committed themselves to supply us any coal from the Banner mine.

BY MR. CUSACK:

Q Is it still under investigation?

A Yes.

Q Mr. Abrahamson, can the Nelson Dewey plant use any other fuel, other than coal?

A No.

Q Is it a fair statement to say that only coal is competitive for your fuel requirements at Nelson Dewey?

A That is true.

Q Is it also fair to say that only coal is competitive for your fuel requirements at [36] Edgewater?

A Yes.

Q With respect to your Rock River generating station, sir, does this use coal solely?

A Yes, it does.

Q Is it fair to state that there are no other fuels which are competitive for the fuel requirements of your Rock River plant?

A At the present time no fuel is competitive with coal at Rock River.

Q Excuse me, sir, but I would like to go back to Nelson Dewey again. You have three suppliers at Nelson Dewey, do you not?

A Yes, we do.

Q You have United Electric and what other companies?

A Consolidation Coal Company and Peabody Coal Company.

Q You have one contract that expires in 1978, is that correct?

A Yes.

Q Whose contract is that?

A That is with United Electric.

[38] For the past two years, with the shortage of coal, we have received coal from various mines in West Kentucky, Southern Illinois, the Belleville District—

Q And Fulton County?

A —And Fulton County.

Q With reference to the Black Hawk plant, sir, of Wisconsin Power & Light, this is the only plant, am I not correct, that uses any other fuel other than coal? Is that correct?

A That is true.

MR. HEDLUND: May I have the question and answer again, please, Mr. Youker.

(The record was thereupon read by the Reporter as above recorded.)

BY THE WITNESS:

A It is true except that we burn gas in our peaking units which I described previously.

MR. CUSACK: Yes.

BY MR. CUSACK:

Q Other than the peaking units?

A Yes.

Q Incidentally, could you explain how a [39] peaking unit operates? When does it operate? When do you use it?

A We should use these units only over our peak load periods. The 30 megawatt plant can be started and fully loaded in 30 minutes. The 17 megawatt plant can be started and fully loaded in less than five minutes.

Q In 1968, sir, how many days in the year did you use the 30 megawatt unit?

(There was a short interruption, after which the taking of the deposition was resumed as follows:)

BY MR. CUSACK:

Q Just give us an approximation.

A We used it something like 2,000 hours, and I think it is on this sheet here (indicating).

Q 2,000 hours is fine.

The 30 megawatt unit was used about 2,000 hours and the 17 megawatt unit was used about how much, sir?

A That unit did not become commercially operational until December 30th, 1968, so it was only used for test purposes, maybe 10 hours.

* * *

[43] Q In regard to this projected plant, sir, and whether or not it will be a fossil fuel plant or a nuclear plant, is it a fair statement to say that your company has had a bellyfull of nuclear [44] plants?

MR. HEDLUND: I am going to object to that, Mr. Cusack. You know how to phrase a question without indulging in invective.

BY THE WITNESS:

A We have had some problems and delays with the construction of the Kewaunee plant. That plant is not scheduled for operation until 1972, so we do not know if our problems are behind us or still ahead of us.

BY MR. CUSACK:

Q When I spoke to you this morning, sir, you did use the word "bellyfull" in regard to your new nuclear plant, did you not?

A Yes, I did.

Q That was your term, was it not?

A That was.

Q It is fair to say, is it not, that you have had some serious problems at the Kewaunee plant?

A Nothing that cannot be overcome.

Q What was the original cost estimate for the Kewaunee plant, sir?

A \$83,000,000.

Q And how much as it going to cost?

[45] A We have applied to the Public Service Commission for \$112,000,000.

Q Do you anticipate that it will cost more than \$112,000,000?

A I am in no position to know.

Q Do you anticipate, sir, that the new generating station that you will complete by 1975 will in fact be a fossil fuel plant?

A The decision has not been announced, that it will be a fossil fuel plant.

In my own opinion, the chances are better that it will be a fossil fuel plant, than that it will be nuclear.

Q Sir, based upon your knowledge and experience generally, and with your company, is it your recommendation that this new plant be a fossil fuel plant?

A It would be my recommendation, yes, sir.

Q Why, sir, do you recommend that this plant be fossil fuel over nuclear? What are some of your general reasons?

A The delays that they have been having in all of the nuclear plants, lack of operating experience and the cost factor.

[46] Q Is it your opinion that the fossil fuel plant will be more economical than the nuclear plant?

A That is my opinion, yes.

Q Sir, when did you begin negotiations for the unit train contract, the long-term contract for the Edgewater plant?

A In the fall of 1966.

Q You stated that someone from United Electric contacted you at that time, to try and send you some coal, or try to enter into a coal contract to supply this plant?

A We are always talking with representatives from United Electric Coal Companies. To my knowledge, we did not receive a proposition from United Electric Coal Companies.

Q You stated on direct examination that United Electric did not convince you that they had adequate reserves to supply Edgewater. Is it a fact, sir, that in fact they did not bid to supply Edgewater?

A They did not give us a formal proposal, that is right.

Q Sir, for the new fossil fuel plant that [47] you plan to complete by 1975, will you enter—

MR. HEDLUND: I believe that carries with it an assumption that you have not established.

BY MR. CUSACK:

Q Assuming that your new generating plant to be completed in 1975 is a fossil fuel plant, will you be able to use coal for that plant from any of the mines located in Illinois?

A It will be designed for a specific coal, usually a lower BTU coal which enables us to burn coal from practically any mine in Illinois, that has the correct fusion temperature.

Q It is a fact, is it not, based upon your professional experience, that you can design a boiler and generating plant to take almost all coals mined in Illinois, is that correct?

A Yes, it is.

MR. HEDLUND: I object to that question as being misleading. I do not know if you are talking about that you can design it for any particular coal that is mined in Illinois, or design it so that it can burn each and every type of coal mined in Illinois.

[48] MR. CUSACK: Thank you.

BY MR. CUSACK:

Q Can you design a generating station at the present time so that it can take each and every coal mined in Illinois?

A No.

Q Do you have to design it for a particular coal?

A It can be a series of coals.

Q Can you design a generating unit that can take Fulton County coal and also Central Illinois coal?

A Yes.

Q Can you design a generating unit that can take Fulton County coal, Central Illinois coal, and Belleville coal?

MR. HEDLUND: Of course, again I think that question is misleading because, as Mr. Cusack is well aware, there are a variety of coals in Fulton County, there are a variety of coals in Central Illinois and there are a variety of coals in Belleville. I think the question is intentionally misleading.

MR. CUSACK: I think the witness can [49] answer the question and the Government suggests that counsel refrain from testifying. I repeat my question, sir:

BY MR. CUSACK:

Q Can you design a boiler at a fossil fuel generating station which can take Fulton County coal and Belleville coal?

A That can be done. However, I must state that some of the Belleville District coals vary and we cannot burn all Belleville District coals at our Nelson Dewey station.

We have Cyclone burners in our boilers over there and some of the Belleville District coal has too high a fusion temperature.

Q What Belleville coal can't you use at Nelson Dewey?

A We have had trouble with some of the Burn-Star mine's coal, coal from some of the Burning Star mines.

Q When you say, sir, that you have had trouble, does this mean that the plant does not operate at the efficiency you would desire?

A We could not get the slag, which is the molten ash, out of the boiler and approach within [50] an hour of the time that we were going to have to shut the unit down.

MR. HEDLUND: I would call that inefficient.

BY MR. CUSACK:

Q Now, you testified on direct examination, sir, that you talked with Mr. Edward Butler of United Electric, is that correct?

A That is right.

Q Mr. Butler called on you in December of 1968?

A Yes.

Q Where did he call on you? At your offices here in Madison?

A In the offices here, yes.

Q Had Mr. Butler called on you prior to this time?

A Yes, he had.

Q As a representative of United Electric?

A Correct.

Q In the course of your conversation with Mr. Butler, did he mention to you any coal reserves of United Electric at what is known as the Industry Field?

[51] **A** No.

Q Did he mention to you any coal reserves of United Electric at what is known as the North Canton Field?

A Not to my knowledge, no.

Q Did Mr. Butler mention to you any coal reserves of United Electric known as the Round Prairie Field?

A No.

Q Could you please tell us, sir, to the best of your recollection, exactly what your conversation was with Mr. Butler in regard to United Electric, not Freeman, but United Electric, being able to bid on supplying a new fossil fuel generating station?

MR. HEDLUND: If the witness is capable of answering that, or if it can be answered, if he can separate what he said about United Electric from what he said about Freeman.

BY THE WITNESS:

A I don't think I can recall too much of what he said about this field. The map he did show us and which showed the reserves had both United Electric and Freeman reserves on the same map.

[52] **BY MR. CUSACK:**

Q What did he say to you specifically regarding United Electric reserves?

A Over the years we have been told both by Ed Butler and by his predecessor that the reserves of United Electric Coal Companies were—that they did not have too many reserves.

Q Was his predecessor Mr. Thomas Tarzy?

A Right.

Q When were you first told by Mr. Tarzy that United Electric had insufficient reserves, in approximately what year?

A I just can't remember.

Q Would it be since 1960?

A I believe it would be since 1960, because United Electric used to sell us coal from the Ruby mine in West Kentucky and that ran out, and it probably was at about that time that they pointed out the lack of needed reserves.

Q When Mr. Tarzy or Mr. Butler talked to you regarding United Electric reserves, did they say at that time that Freeman had adequate reserves?

A No.

[53] Q Did they at that time try to sell you Freeman reserves in lieu of United Electric reserves?

MR. HEDLUND: Now, it is not clear to me what the time is that you are talking about. Do you mean the first time—

MR. CUSACK: At any time.

MR. HEDLUND: (Continuing)—or at any time since 1960?

MR. CUSACK: At any time since 1960.

MR. HEDLUND: He has already testified as to one mention made by Mr. Butler. Now, you are asking, was there ever any other mention? Is that what you are asking, Mr. Cusack, so I understand the question?

MR. CUSACK: That is right.

BY THE WITNESS:

A I think that the Freeman reserves were brought up in conversations within the last year or year and a half.

BY MR. CUSACK:

Q Now, Mr. Butler, when he came to talk to you—he is a United Electric employee, is he not?

[54] A That is right.

Q He attempted to sell you some Freeman reserves, is that correct, for this possible new fossil fuel generating station?

A This was a preliminary talk about a contract for the new generating station.

Q Was it your understanding, sir, that this proposal—would you call it a tentative proposal?

A Tentative.

Q Was it your understanding that this tentative proposal involved a mine to be operated by Freeman?

A It could have.

Q Did Mr. Butler indicate to you who would operate this new mine?

MR. HEDLUND: I think you are getting metaphysical, Mr. Cusack.

BY THE WITNESS:

A At the time he was talking to us, it was thought that both companies would be owned by General Dynamics.

.

[61] Q That is an underground mine located in the Belleville Freight Rate District?

A Yes, it is.

MR. CUSACK: I have no further questions. Thank you, Mr. Abrahamson.

REDIRECT EXAMINATION

BY MR. HEDLUND:

Q Mr. Abrahamson, is it not true that for every kilowatt hour generated at your hydroelectric plants, you need to burn just that much less coal throughout your system?

A That is true.

Q Is it true that for every kilowatt hour at your peaking stations you have to burn just that much less coal or have just that much less coal burning capacity?

A Yes.

Q Is it not also true that for every kilowatt hour that will be generated by your Kewaunee nuclear station, that you will be required to burn just that much less an amount of coal?

A We will burn less coal because of the Kewaunee nuclear plant.

[62] Q In the light of that, then, while you have stated that coal does not compete with any other energy at Nelson Dewey because Nelson Dewey is not capable of burning any other fuel, is it not the case that coal competes directly, throughout your system, with all of the forms of energy that I have mentioned?

A Yes, it does.

Q You have referred, Mr. Abrahamson, to a shortage of coal at present. Have you encountered any shortage of coal being offered to you as part of the process of entering into long term coal contracts?

A No. We have encountered no difficulty at all.

Q You mentioned, I believe, with respect to Nelson Dewey, a tow line being brought in from Kewaunee, was that—not Kewaunee, but from Shawneetown?

A We are getting one tow at the present time from Shawneetown.

Q At Nelson Dewey you buy coal on a delivered basis, do you not?

A Yes.

. . . .

[18]

EXCERPTS FROM DEPOSITION OF
GEORGE P. GAMBLE, TAKEN JUNE 27, 1969

* * * * *

BY MR. FUTTERMAN:

Q What about in 1968?

A In 1968 there was somewhat of a falloff in that. And in 1969 there's been an even greater falloff.

Q How many nuclear plants have been ordered so far in 1969?

A I think, one.

Q Mr. Gamble, why have orders for nuclear equipment declined in 1969 and in 1968?

MR. HEDLUND: Are you asking for his opinion or his knowledge?

MR. FUTTERMAN: I'm asking for his knowledge.

THE WITNESS: All evidence points to the fact that the orders placed, say, in '66 and '67 pretty well overloaded the facilities of the manufacturers who had not been fully braced for that rapid a rise in the atomic sales, let's say; and that, plus some realization that it would be better to see some of these plants operating before a company that already ordered one or two made any further commitments, is just normal conservatism, would have a great deal to do with the situation.

MR. FUTTERMAN: Mr. Gamble, by conservatism, did you mean that there are certain bugs and uncertainties concerning the operation of existing plants that have to be cleared up before this conservative attitude on the part [19] of electric utility executives would clear up?

MR. HEDLUND: May I have the witness's answer prior to that question, please? And the question?

(The pending question and answer were read by the reporter.)

THE WITNESS: The operation to date of the light water reactor plants in existence and running has been good indeed, and very encouraging. Their size has been

what is looked upon as relatively small—say, 200,000 kilowatts, or thereabouts. And since many of these new plants have been considerably larger—600,000 to 800,000 and a million kilowatts—the conservatism is based upon product-industry experience that when you extrapolate to larger sizes, always some types of problems just naturally will develop. They usually are not very serious. They usually have been overcome without too much—if you get too far with too much of that large stuff hanging over you, you could be asking for problems that take you additional time and money to clear up. But the conservatism is not based on any poor performance by the reactors which have previously come on the line.

BY MR. FUTTERMAN:

Q Have there been any problems in connection with the operation of, I believe it's the Oyster Creek Plant on the east coast?

A They have just barely gone into operation, if it [20] is in operation. It was going into operation about now. So I would say the answer to that would be "No." The problems at Oyster Creek were associated with some welds during the progress of construction.

* * * *

[23] Costs have gone up from some \$440 million to over \$700 million in the estimate, and if they had ordered the equipment for that, and I think they probably had, they would undoubtedly have cancelled it. But I don't know that for sure.

Q Mr. Gamble, do you know of any utilities which have placed orders for fossil fuel plants after having placed orders for nuclear plants?

A Yes, I'm sure that a number have.

Q Mr. Gamble, is it possible for a construction delay to have any effect on the per-kilowatt cost of constructing a nuclear power plant?

A Any power plant that's delayed costs more.

Q Is an electric utility more likely or less likely to experience delays in the installation of nuclear plants as opposed to the installation of fossil fuel plants?

MR. HEDLUND: May I have that question, please?

(The pending question was read by the reporter.)

MR. HEDLUND: I don't know how that question could be answered.

THE WITNESS: I would say that the nuclear art being a relatively new art, and the regulatory responsibility of the AEC entering the picture, and the necessity to be sure that in this new art safety is given every reasonable consideration—every possible consideration, really— [24] that there's a greater likelihood of delay than in a relatively established art which the fossil fuel plant is, in which there are not some unknown and certainly not some new frontiers to develop.

Q Is there a greater or lesser degree of technical competence required for nuclear plant personnel as against fossil plant personnel?

A There would certainly be a different type of information and education, you might say, to which fewer people have been exposed so far, than the present generation of operators and engineers who have grown up on the fossil plants. The large ones are by no means simple, and as a matter of fact, it's my feeling that the operation, as such, of a nuclear plant, once everything is in place and going, is really a simpler thing than the operation of a fossil plant. But the technology involved now is different and is certainly complex.

Q Have any existing nuclear plants in the United States experienced any operating problems?

A Well, all plants experience operating problems. I don't care who built them or what type they are. So I'd say they have. But as far as I know—we are confining ourselves to the light water type of plant—there have been no problems that have had any serious bearing on the operation of the plants.

* * * *

[3]

EXCERPTS FROM DEPOSITION OF
JACK A. SIMON, TAKEN JULY 31, 1969

* * *

JACK A. SIMON,

called as a witness by the Plaintiff herein, having been by me, the said Frances B. Spina as Notary Public aforesaid first duly sworn, was examined upon oral interrogatories, and he did thereupon depose and testify as follows:

DIRECT EXAMINATION

BY MR. CUSACK:

Q Please state your full name.

A Jack Aaron Simon.

Q And what is your home address?

A 502 West Oregon Street, Urbana, Illinois.

Q And what is your present position, Mr. Simon?

A I am Principal Geologist of the Illinois State Geological Survey.

Q And are you appearing today under subpoena?

A Yes, sir.

Q How long have you been the Principal Geologist of the Illinois Geological Survey?

A I have been Principal Geologist for two years, and prior to that, for about fifteen years, was [4] head of the Coal Section of the Illinois Geological Survey.

Q And could you please tell us, just very generally, what the duties and functions of the Illinois Geological Survey are?

A In general, or as it relates to coal?

Q Why don't you do both?

A Well, the Illinois Geological Survey is concerned primarily with geological and geochemical research on natural resources of the State, including the fuels, clays, oil and gas, and a broad variety of industrial minerals.

We are concerned with the geology of their occurrence, their quality, and in some measure their fundamental nature, and, with some of the resources, uses.

Q Could you tell us what are the duties of the Geological Survey in regard to coal reserves?

A Well, I would estimate that perhaps half of the fairly extensive program that we have in coal geology is related to a continuous program of mapping of coal reserves of the State, including quality, quantity, and studies of the associated rocks.

* * *

[9] If we had information that they were coal-handling docks, they are shown; and this information was developed from charts of the United States Army Corps of Engineers.

MR. CUSACK: Mr. Hedlund, does the standing stipulation apply to what has previously been marked as Nugent Deposition Exhibit 38, the map entitled "Shipping Coal Mines in Illinois, Jack A. Simon"?

MR. HEDLUND: Yes.

MR. CUSACK: Thank you.

BY MR. CUSACK:

Q One more question that has some relation to this map: Is the coal field, as set out on this map—

MR. HEDLUND: I object to the phraseology "the coal field," as an incorrect characterization of the testimony of Mr. Simon. There has been no testimony that that depicts a coal field.

BY MR. CUSACK:

Q Mr. Simon, is the area of coal, as set out in this map, also part of an area of coal located in West Kentucky and in Indiana?

MR. HEDLUND: Also object. Mischaracterization.
[10] There has been no testimony that the map depicts a coal field.

MR. CUSACK: Will you please answer the question, sir?

MR. HEDLUND: May I have the question back, please?

Q (Read by the reporter.)

MR. HEDLUND: I want to rephrase my objection. There has been no testimony that the map depicts an area of coal.

MR. CUSACK: Will you please answer the question, sir.

BY THE WITNESS:

A The area on this map that has the blue-green color, or approximately that, depicts the area underlain by the coal-bearing sequence of rocks, which is called the Pennsylvanian System, and actually depicts the area of the sequence of rocks, as opposed to coals themselves.

This is part of an area which extends into West Kentucky and Western Indiana, which is part of an area that is commonly referred to as a coal basin, although it is not a continuous—It is called a coal basin by virtue of the configuration of this coal- [11] bearing sequence of rocks.

BY MR. CUSACK:

Q Are there any particular specific names, sir, for this coal basin in Western Indiana, Western Kentucky and Illinois?

A Well, it has commonly been referred to as the Illinois Basin, which sometimes has been used in a much more restricted sense. It is commonly referred to as the Illinois-Indiana-West Kentucky Coal Field. It is also commonly referred to as the Eastern Interior Province, which has really been taken from the designation by the U. S. Geological Survey maps of the coal fields of the United States, in which it is described as the Eastern Region of the Interior Province; the Western Region being Iowa, Nebraska, Kansas, Arkansas and Oklahoma; and this Illinois-Indiana-Kentucky portion being the Eastern Region.

Q Would it be proper then, sir, to describe the coal fields of Illinois, Indiana and West Kentucky, that is, Mining Districts 9, 10 and 11, as the Eastern Interior Coal Province?

MR. HEDLUND: Object as leading, and as contrary to what the witness has described the area as it is commonly known.

[12] MR. CUSACK: Will you please read the question, Mrs. Spina?

Q (Read by the reporter.)

BY THE WITNESS:

A I am not really fully informed on what these Districts 9, 10 and 11 are. In general, I know that they apply to those regions, but I really am not familiar enough, and I know I have even used those numbers without being that aware. But in general, the coal production from Western Kentucky, Illinois and Indiana all comes from this area that is described, in terminology of the U. S. Geological Survey, as the Eastern Region of the Interior Province, on their map of the coal fields of the United States.

BY MR. CUSACK:

Q And this has also been commonly referred to as the Eastern Interior Coal Province, has it not?

MR. HEDLUND: Are you telling him that, or are you asking, Mr. Cusack?

MR. CUSACK: I am asking the question.

BY MR. CUSACK:

Q Has it not also been commonly referred to as the Eastern Interior Coal Province?

A Yes.

* * *

[19] Q Sir, what is the largest state in the United States in total minable bituminous coal reserves?

A Well, as of the latest available information to us, the State of Illinois has the largest reserves of bituminous coal.

Q Is this minable as defined by the report?

A Coal reserves or minable coal reserves, as defined by the report.

Q And what state, sir, has the largest amount of strippable bituminous coal reserves of any state in the Union?

A As defined in this series of reports, Illinois has the largest known reserves of bituminous coal.

Q Of strippable bituminous coal?

A Strippable bituminous—strippable as defined in the studies.

Q And the studies of strippable coal reserves, sir, would include the various publications of the Illinois Geological Survey, entitled "Strippable Coal Reserves of Illinois," is that correct, sir?

MR. HEDLUND: May I have the question, please.

. . . .

[3]

EXCERPTS FROM DEPOSITION OF
JOHN E. ORGAN, TAKEN AUGUST 1, 1969

* * * *

MR. SIMS: Mr. Organ, during my direct examination if you do not understand one of my questions or a word, if you will tell me, I will try to clarify it for you.

Also, if you have a question as to the location of a county or a city or a mine, we have a deposition exhibit marked Tarzy Deposition Exhibit 1, a map by the Paul Weir Company, that you may feel free to look at to refresh your memory, if you like.

MR. HEDLUND: Off the record.

(There was discussion off the record, after which the taking of the deposition was resumed, as follows:)

MR. SIMS: Will you swear the witness, please.

(The witness was thereupon duly sworn.)

JOHN E. ORGAN,

called as a witness by the Plaintiff herein, having been by me, the said Frances B. Spina as Notary Public aforesaid, first duly sworn, was examined upon oral interrogatories and he did thereupon depose and testify as follows:

DIRECT EXAMINATION

BY MR. SIMS:

Q Would you state your name and address, please.
[4] A John E. Organ, 301 West Washington Street, Sullivan, Indiana 47882.

Q How long have you lived in Indiana, Mr. Organ?

A This last time, 36 years.

Q Have you ever lived in Illinois?

A Briefly, yes.

Q During what time?

A 1932, for a few months.

Q Would you describe your educational background?

A Bachelor's in geology at Indiana University, 1928; Master's at George Washington University, 1929; and a year on a Doctorate in 1929-1930.

* * *

[111] Q This is your personal program?

A Yes.

Q It was not instigated by any coal company; it was your decision?

A It was my idea, and they concurred, and I was busy for that eight-year period, seven or eight years.

Q Well, has the program terminated?

A Yes.

Q And what is your position now, as far as exploration?

A Well, I am just a retired—

Q You have retired?

A Yes. That is, let's say semi-retired.

Q Now, in the last two sentences I read of your report, you used the words "economically minable strip reserves." What do you mean by these words?

A Well, if we don't have anything to do for the next couple of months, maybe we could get into that. No, I don't want to be facetious, but—

Roughly, present day, I would say you had to have thick seam, with ratio that didn't exceed 20-to-1, that is, your top ratio 20-to-1, over 100 feet, and 40-million-ton reserves. Maybe 30 or 35, but—

[112] Q These are the factors that you used in determining what was economically minable strip reserves?

A I think that would be close to it. If it weren't in that neighborhood, you wouldn't be able to talk anybody into doing it.

Q Were there any other factors besides those that you have just mentioned?

A Well, your closeness to transportation, closeness to market, and that sort of thing, quality, would all enter into it to a certain extent, but that would be your main framework of what you are looking for.

Q And that would be the ratio, the height, the overburden?

A Well, you don't know where it starts, but it couldn't be over 100 feet or 20-to-1 at your outside figure, which would give you a workable ratio below that.

Q Well, do you know of any tracts of 40 million tons, strippable reserves, that would not fit in with your definition of economically minable but it would be in one block together, that has not been acquired by a coal company at this date?

A No. Nothing that large.

[113] Q Do you know of anything over 20 million tons?

A Not really, with the possible exception of that spot there north of DuQuoin, which is urbanized to where you can't do anything with it.

Q You refer to the Illinois Basin in these two sentences. You mentioned this earlier, but I want to make sure I understand it.

What is your definition of "Illinois Basin"?

A Illinois Basin is that coal basin which lies wholly within Illinois, Indiana and West Kentucky.

Q Is there any other name for this coal field?

A I don't know. That is the one that I have always used, and most of the geologic fraternity. Some of them call it Eastern Interior, Western Interior, of the Central Basin. I forget just how they word that, but Illinois Basin is the right name for it, I think.

Q Is this a geologically united coal area?

A Yes.

Q Here again you have touched on this, but I want to nail it down.

The last paragraph of your report, the first sentence, which reads:

"Based upon my knowledge and experience, I concluded that by 1960 there was no longer [114] any possibility of acquiring or establishing or transfer to coal producers or any new economically minable strip coal acreage in the Illinois basin of sufficient size to justify the opening of new mines."

[115] Q Turning to the last paragraph of your report, there is a sentence which reads:

"Within the past two years I have, on numerous occasions, discussed the availability of strip reserves in the Midwest with a variety of coal executives knowledgeable in this field. I have also re-reviewed data released by the Illinois Geological Survey pertaining to this question."

Would you name the coal executives you talked to concerning the availability of coal reserves?

A Yes. Bill Weimer, W. A. Weimer, who is Vice President of Peabody.

Q When did you talk with him?

A I think in 1967.

Q And what did he tell you?

A The thing that stands out in what he told me was that he didn't think over ten percent of the amount shown in the State Geological Survey figures was ever there to begin with. That was before there was any strip.

Q Was this conversation with Mr. Weimer in connection with your employment by Mr. Hedlund?

A Yes, although I don't think I—

[116] You see, a lot of these conversations were at the Mining Congress, at the Illinois Mining Institute, and that sort of thing.

Q Who else did you talk to?

A I remember talking to Broecker, who was of course readily available. I was rubbing elbows with him all the time. He is an Ayrshire Vice President.

I talked to Miller Spears of Morgan Coal Company, Harry Eiteljorg's partner, and has been their coal hunter.

Q What did Mr. Broecker say?

A Well, he is so slightly knowledgeable in this thing. You see, he was a stone man up until ten years ago, so he sort of disqualified himself. He said, "I really don't know enough to be quoting," and I think he was right in that.

Q What did Mr. Spears say?

A Miller Spears said that he would say, if he were asked, that there was no large area available.

But to begin with, he said, "Of course, John, you know we have always looked for a different sort of thing than you are thinking about. We looked for small areas which we could buy." And he didn't add this, but, "We looked for small areas that we could resell [117] or work ourselves."

Q Did he say what size areas he considered small?

A Well, I know one of them was down at Banner, and it was about a million and a quarter tons. A lot of the properties they bought were small tonnage-wise, but they usually were well chosen.

Q This property at Banner, did they not sell this to United Electric?

A United Electric, I think, but I don't know when or what the terms were, or anything about the transaction.

Q Morgan Coal Company does mine coal itself?

A They did, but they sold out to Peabody a number of times, at least twice.

Q They sold out a number of times. Do you mean sold their existing mine?

A Well, sold out, started over again, sell out again.

Q When was the last time they sold out?

A Oh, I think maybe four years ago, something of that sort.

Mr. Eiteljorg and Mr. Spears have been very able operators.

[118] Q This is one coal company, then, that did not require the 40 million block of coals?

A But they bought it, like you, an investor, would if you went out and sniped a piece of choice real estate, figuring on selling it to your neighbors eventually.

Q But they sold it to coal companies, did they not?

A Yes.

Q Are there any other coal executives you talked to?

A Yes. I talked to Hugh Lee, Jr., who is, or was, up until a month or six weeks ago, the Executive Vice President in charge of sales for Peabody, but he used to be President of Maumee at the time it was acquired, in 1959.

Q And what did he tell you about strippable reserves?

A He made the categorical statement that there wasn't any big reserve at that time.

Q Did he define what he meant by "big"?

A No. None of them did, for that matter.

Q What other executives did you talk to?

A I talked to Roy Dean, who was a former [119] Vice President of Ayrshire; and to Arnold Lamm, President of Pittsburg-Midway.

Arnold Lamm made a categorical statement about the lack of strip coal.

Q Do you know what Mr. Hugh Lee is doing now?

A Yes.

Q What is he doing?

A He is Vice President in charge of public relations for Peabody, and he is Vice Chairman of their Executive Committee.

Q Have you talked to all of these people since 1967?

A I would say at least 1966 to 1967, along in there.

Q Now, what did Mr. Lamm tell you?

A Mr. Lamm said, "Of course," he said, "you know I was with United Electric up until some time about 20 years ago," and then he said, "When I came back out to run Pittsburg-Midway, from my venture in Ohio, I found we had a very strong sales organization, specializing in Northern Illinois coal, and we had no coal," and he said, "We turned heaven and earth trying to find it, and we didn't find it."

Q This was in Northern Illinois?

[120] A Yes. Northern and western.

Q Now, who was the other man that you mentioned in connection with Mr. Lamm?

A Roy Dean. He was the former Acting Executive Vice President of Ayrshire. He left there in 1966, I think.

Q What were his comments on the subject?

A No large areas available.

Q Can you recall any other executives you talked to on this question?

A It seems to me I have left out a couple, but it is the sort of thing that strip bidders always get into when they get together.

Q Strip miners are always talking about the availability of strip reserves?

A What a hell of a shape they are in about reserves, and all that sort of thing, and it is all true.

Q Were they talking about it ten years ago?

A Oh, I can't put a number on it, but—

Q Well, is this a perennial thing that strip miners talk about, the lack of strip reserves?

A They always have.

* * *

[136] Q Is this right in the middle of the Humble properties?

A On both sides of that Monterey property.

Q Do you anticipate this property will be mined at some time in the future?

A Yes. I hope so.

Q Other than what you have mentioned, what have been your underground activities in the Illinois Basin since 1960?

A Well, that is about it. I didn't get anything too positive done other than that.

Q Mr. Organ, have you looked at any underground coal in Washington or in Perry counties, Illinois, since 1960?

A No.

Q Have you ever examined any underground coal reserves in Washington or in Perry counties, Illinois?

A No.

Q Mr. Organ, is it true that in years past strip coal reserves which were once considered not economically minable have become economically minable?

A That is true to a certain extent.

Q At one time it was impossible, was it not, to strip coal under 50 feet of overburden?

[137] A Way back, that is right.

Q Do you have any opinion, sir, or do you have any knowledge, of the maximum amount of overburden which can now technologically be removed over a coal seam?

A No, I don't know. I have lost count on this newer equipment, the real large equipment, but theoretically it

can be removed up to—I don't suppose there would be any theoretical limit, but there is an actual limit because as you increase the size of this equipment the cost increases damned near to the square of it. It isn't—

Q You are not familiar with the Big Muskie shovel of Bucyrus Erie?

A Is that the one over at Zanesville?

Q Yes, sir. In Ohio.

A No, I am not real familiar with it. I have read a little about it.

Q Mr. Organ, you have testified that you have, in the past, taken options on coal reserves. Is this correct, sir?

A Yes.

* * * *

[149] Q Do you believe they will make an attempt?

[150] A Oh, sure. Of course, they have new ownership coming up, which may make a difference.

MR. HEDLUND: May I have that answer back, please?

A (Read by the reporter.)

BY THE WITNESS:

A I don't need to elaborate on that.

BY MR. CUSACK:

Q Mr. Organ, do you believe that any profitable strip-coal producer, operating in the Illinois Basin, will have to eventually get into underground mining in order to remain in business?

MR. HEDLUND: By that do you mean the coal business?

MR. CUSACK: To remain in the coal business, yes, sir.

MR. HEDLUND: In Illinois.

MR. CUSACK: In the Illinois Basin.

BY THE WITNESS:

A If he stays in Illinois, he will have to go in the underground business eventually.

BY MR. CUSACK:

Q Do you feel that the strip-coal mines of the major strippers in the Illinois Basin will be exhausted [151] at about the same time?

A No. There will be a big difference in the periods, due to the nature of the reserve picture.

Q Mr. Organ, do you believe that if a strip-coal company acquires underground reserves that it follows that the strip-coal company eventually plans to mine these underground reserves?

A Yes. If they acquire them, they intend to work them.

MR. CUSACK: Mr. Hedlund, the Government reserves the right to interview or re-depose this witness after you have determined what the subject matter of his testimony will be at trial, if such testimony will cover matters not listed in the report of Mr. Organ as contained in his letter to you dated July 8, 1969.

MR. HEDLUND: Have you finished your interrogation with respect to all the subject matters contained in his report?

MR. CUSACK: We are finished with his deposition. And we would like to thank you, Mr. Organ.

. . . .

[3]

EXCERPTS FROM DEPOSITION OF
JOHN PAUL WEIR, TAKEN AUGUST 5, 1969

* * * * *

JOHN PAUL WEIR,

called as a witness by the Plaintiff herein, having been by me, the said Frances B. Spina as Notary Public aforesaid first duly sworn, was examined upon oral interrogatories, and he did thereupon depose and testify as follows:

DIRECT EXAMINATION

BY MR. CUSACK:

Q Please state your full name.

A John Paul Weir.

Q And what is your home address, Mr. Weir?

A 1200 Spruce Street, Winnetka, Illinois 60093.

Q By whom are you employed?

A Paul Weir Company.

Q In what capacity?

A I am Executive Vice President.

Q Mr. Weir, would you please tell us, very generally, your educational background?

A I was educated as a chemical engineer and received a Bachelor of Science degree in 1944.

After service in the Navy, I returned to school [4] and went to Penn State and received a degree in mining engineering, a Bachelor of Science degree.

* * * * *

[7] A Our responsibility in that instance was for all of the facilities, from the coal seam on out; that is, the slopes and the shaft, the surface facilities, [8] the belt conveyors overground, and the barge-loading facilities.

We prepared drawings of those facilities and prepared invitations to bid, performance specifications, and they were sent out for bid, so that the bids, when received from the contractors, could be compared and let.

Q Were the duties of the Paul Weir Company in regard to the Hamilton Mine parallel to the duties in regard to the Crown Mine?

A Not exactly. Somewhat similar responsibilities, however.

Q What were the differences, just very generally?

A In the case of the Crown Mine we were also charged with the actual layout of the underground; in the instance of the Hamilton Mine we were not. I would say that was the basic difference.

Q I see. The layout would be the same as the mining plan. Is that fair to say?

A That is right.

Q And you say you worked on the Hamilton Mine. Was that in the 1960's?

A That is right.

* * * *

[16] **THE WITNESS:** May I look at our map?

MR. CUSACK: May we go off the record for a minute?

MR. HEDLUND: Sure.

(There was discussion off the record, after which the taking of the deposition was resumed, as follows:)

MR. CUSACK: Will the reporter please mark, as Weir Deposition Exhibit 1, a map entitled "Illinois-Indiana-West Kentucky, SHIPPING COAL MINES, January 1969, Prepared by Paul Weir Company, Incorporated."

(The map was thereupon marked Weir Deposition Exhibit 1 for identification, 8-5-69.)

BY MR. CUSACK:

Q Mr. Weir, before I get back to the last question I posed to you, would you please identify what has been marked as Weir Deposition Exhibit 1 for identification?

A This is our published map of shipping coal mines in Illinois, Indiana and West Kentucky. It is copyrighted as of January 1969, and it shows all of the large mines in the Illinois Basin.

[17] Q Incidentally, the Illinois Basin, does that include the coal regions of Illinois, Indiana and West Kentucky?

A That is correct.

Q And is the term "Eastern Interior Coal Province" synonymous with the term "Illinois Basin"?

A Correct.

Q Thank you.

Mr. Weir, is the information contained on Weir Deposition Exhibit 1 correct?

A To the best of our knowledge, yes.

Q Now, if I can rephrase my prior question, with permission of counsel, I believe I asked you what feasibility studies the Paul Weir Company had performed on any of the strip mines located in the Midwest Coal Field—which is also synonymous with the Illinois Basin, is that correct? Midwest Coal Fields and Illinois Basin is the same thing?

A Yes.

THE WITNESS: Do you mind if I refer to this map?

MR. CUSACK: Please do.

* * * *

[52] Generally, with a thin seam, less of the actual coal is actually recovered, in an effort to keep the raw product relatively clean. With a thick seam, more is recovered, and we think a reasonable estimate for this thickness of seam is a mining recovery of 85 percent. Then the preparation recovery will vary according to the characteristics of the coal. Although we did not have very good information on the washability of this particular coal, we estimated 80 percent. So that the overall recovery, as I have said, the product of the two or 68 percent.

Q Do you know what the overall recovery is of the coal at the Banner Mine of United Electric?

A I know that roughly it is within this same order of magnitude.

Q Sir, is it possible that the Industry coal could be sold raw, as mine-run coal?

A It is very doubtful.

Q In your opinion?

A Yes.

Q And on what do you base that opinion?

A The unwashed product just wouldn't measure up to the marketplace.

[58] Q What I am trying to determine, Mr. Weir, is: Other than the information that you have set out in Weir Deposition Exhibits 4-A and 4-B, and as I understand your testimony, the schedule of properties on Exhibit 4-B are the properties which are contiguous to the present controlled acreage at Industry, what I am trying to determine is, do you have an estimate of what non-contiguous reserves near the Industry Field could be added to the Industry Field if United Electric made a business decision to expand the field?

A I am afraid I can't answer until you tell me what kind of reserves.

Q Well, let me put it this way—

A Economically minable reserves?

Q Reserves similar to the reserves now held in fee at Industry.

A Only drilling would prove the character of the additional reserves that might be put together in that area. However, we would expect those to be somewhat inferior to the reserves in the Industry Field.

Our report points out that the Industry Field, in our opinion, is marginal, and we would [59] question a business decision of acquiring more reserves in this area.

Q In regard to the conclusion of your report terming the Industry Field to be marginal, would you anticipate that the Industry Field may become economically minable at such time as the strip reserves in the Fulton-Peoria area, in Fulton County and in Peoria County, are exhausted?

MR. HEDLUND: Are you talking about all—well, let me have that question back again, please.

Q (Read by the reporter.)

MR. HEDLUND: Mr. Cusack, I don't understand the context in which you are using "strip reserves."

Do you mean those strip reserves—and confining it to the two counties you mentioned, Peoria and Fulton—as

are presently either being mined or are owned or controlled by existing producers?

MR. CUSACK: Yes. Or are available in those countries.

MR. HEDLUND: Well, all right, if the witness has an opinion.

[60] BY MR. CUSACK:

Q Do you have an opinion, sir?

A I do have an opinion. I don't think that these reserves will ever be mined, in any circumstance.

Q On what do you base that opinion?

A Because coal can be mined elsewhere at lower cost.

Q Where, sir?

A If this coal was going to be hauled to the river, lower-cost coal could be moved to that point; for example, from the Belleville district, from proposed mines on the —underground mines on the Kaskaskia River.

Q Is it your testimony then, sir, that the proposed underground mines on the Kaskaskia River will, in the next, is it fair to say 20 years, be more economical than strip mines located in Schuyler and McDonough counties?

MR. HEDLUND: I don't believe that is his testimony. He has not so stated.

BY MR. CUSACK:

Q Would that be your opinion, sir?

MR. HEDLUND: Are you talking specifically about the Industry Field, or are you also [61] including Sun Spot or—

BY MR. CUSACK:

Q I would include any mines located in Schuyler and McDonough counties.

MR. HEDLUND: May I have the question back, then, please.

(The question was thereupon read by the reporter, as follows:

“Q Is it your testimony then, sir, that the proposed underground mines on the Kaskaskia River

will, in the next, is it fair to say 20 years, be more economical than strip mines located in Schuyler and McDonough counties?")

BY THE WITNESS:

A My opinion is that they would be more competitive.

BY MR. CUSACK:

Q Then strip mines located in Schuyler and McDonough counties?

A That is right.

Q And these underground mines, sir, to be located on the Kaskaskia River, in what counties are these, sir?

[62] A Primarily in St. Clair County.

Q Who are constructing these mines? Do you know?

A Peabody Coal Company has substantial reserves in this area.

Q And when are these mines expected to be in operation? Do you know?

A Several of them will be developed within the next five to ten years.

Q Is it your opinion that these mines will supply some of the demand formerly supplied through the Fulton-Peoria mines?

A Yes.

If I may amplify that answer.

Q Yes. Please do.

A Number 2 coal production by stripping, in this immediate area, has been a marginal situation. The Industry reserves are less attractive, the overburden ratio is heavier, and the coal is located further away from water transportation, so that they are even more marginal than the existing marginal operations, and we doubt very, very much whether such reserves would be developed.

* * *

[65] BY MR. CUSACK:

Q And these new mines you are referring to are the deep mines on the Kaskaskia River, is that correct?

A Those, and possibly others.

Q These new mines on the Kaskaskia River will be underground mines, is that correct, sir?

A That is correct.

Q Are strip mines, as a general rule, more profitable than underground mines?

A I couldn't give you any general rule. It depends very heavily upon the overburden ratio. This is pointed out in our report.

Q Do you know of any underground mines in the Central Illinois Freight Rate District which are as profitable as the United Electric mines, strip mines?

This is, of course, on a tonnage basis.

MR. HEDLUND: Are you including all United Electric strip mines?

MR. CUSACK: All four, yes.

BY THE WITNESS:

A That is a rather broad question. Which United Electric mine are you talking about?

BY MR. CUSACK:

Q I was referring to all of them, but if you [66] would like me to do it individually, that would be fine.

A The difficulty comes in the difference in capital investment for strip mines, and that is so heavily dependent upon the ratio, as indicated in our report.

With a high overburden ratio the capital investment is likely to be very high, so that a very high cash flow is necessary for profitable operation, a high realization. Well, this is much less so with an underground mine, where the capital investment is less. And eventually the point will be reached where the capital investment for strip mining will be so high that strip mines will no longer be able to compete.

Q Generally speaking, then, is it a fact that a deep mine is less expensive to open than a strip mine?

A This is certainly the trend in the Illinois Basin, as the shallow reserves are being mined out and what is left is under heavy cover, and in many instances such heavy cover that the reserves are not economic and probably will never be mined.

Q Do you anticipate that in the next ten or fifteen years most of the mines which are going to be [67] mined in the Illinois Basin will be deep mines?

A Certainly. This is inescapable. That is just the nature of the reserve picture in the Midwest, and the economics of deep mining versus strip mining.

Q Other than the Denmark acreage of Ayrshire, are there any substantial strip coal deposit remaining in Illinois, according to your opinion?

A We made the statement in our report, and it is our opinion, that there will be no more comparable large mines through Denmark. There will be a few more smaller mines of the range of perhaps 750,000 tons to a million tons annual capacity, and this is because the available tracts of economically minable reserves are of the order of magnitude of five to ten million tons, perhaps somewhat more. But we are generally familiar with the inventory of coal reserves that these strip mining companies have available, and large blocks of it will support large economical operations just don't exist.

Q Is it your testimony that in the next ten or fifteen years there will be a few strip mines opened with total reserves of approximately ten million tons?

A A few, yes.

Q And where do you anticipate that these will [68] be opened? What counties, for example?

A I believe that there will be additional operations in west Kentucky.

Q What about in Illinois?

A Actually, no particularly likely prospects come to mind. I don't know of any that are really in the wind. That is not to say that the operating strip-mining companies do not have some reserves left, but not of the type that will support large-scale mining.

Q Have you made any study for the Commonwealth Edison Company in regard to coal reserves, strip coal reserves, located in Adams County, Illinois?

A No.

Q Have you made any study for the Pittsburg & Midway Coal Mining Corporation in regard to strip reserves located in Adams County?

A No, we have not.

Q Have you made any study for any coal company or any coal consumer, or for anyone else, for that matter, in regard to strip coal reserves located in Hancock County, other than the Augusta Field, which we will discuss?

A No specific study. We are generally familiar [69] with the coal occurrence in those areas.

MR. HEDLUND: Is the Government familiar with such studies by anyone else?

MR. CUSACK: No.

BY MR. CUSACK:

Q Did you know that United Electric operated a strip mine near the town of Rushville, which is fairly close to the town of Industry, in McDonough County?

A At what time?

Q In the 1940's and early 1950's, I believe.

A No, I am not familiar with that one.

What was the name of the mine?

Q I believe they call it the Rushville Mine.

A I am not familiar with it.

Q Directing your attention, sir, to the 1980's and 1990's, approximately 25 to 30 years from now, in your professional opinion do you believe that there is any possibility that the Industry Field may be mined in this period of time?

MR. HEDLUND: Asked and answered. The witness has testified he doesn't believe that coal will ever be mined.

MR. CUSACK: Please answer the question, sir.

[70] Will you repeat the question, please.

Q (Read by the reporter.)

BY THE WITNESS:

A There is practically no possibility.

BY MR. CUSACK:

Q In your opinion?

A In my opinion.

Certainly it is technically possible to mine the coal. That isn't the question. Whether it is competitively

practical or it is feasible to do it and make a decent return is very questionable, and I don't believe it ever will happen.

The major strippers do not have positions in that coal seam, in that area, and I refer to Peabody and Consol; that is, any reserves that they have are strictly minor, and they have no plans for the area.

Q Is that determinative of your opinion?

MR. HEDLUND: What do you mean by "determinative"?

BY MR. CUSACK:

Q Is that the main factor on which you base your opinion?

A No, it is not.

* * *

[120] Q And the Sun Spot coal, sir, moves to a loading dock on the Illinois River opposite Beardstown, Illinois, is that correct?

A That is right.

Q In the fourth paragraph, sir, at Page 2 of this letter, the statement is made that larger excavating equipment permits the removal of as much as 125 feet of overburden.

Do you know, Mr. Weir, whether or not there is stripping equipment now on the market which is capable of removing over 125 feet of overburden?

MR. HEDLUND: May I have that question, please?

Q (Read by the reporter.)

MR. HEDLUND: Do you mean as an engineering matter?

MR. CUSACK: As I phrased my question.

BY THE WITNESS:

A Do you mean in a single cast?

BY MR. CUSACK:

A No, sir; I don't mean in a single cast.

Is there one piece of equipment available today which can remove more than 125 feet of overburden over a coal seam?

A In a single cast, that is about the effective [121] limit.

Q What do you mean, sir, by a "single cast"?

A By picking up the overburden and simply spoiling it. If you get beyond about 125 feet of cover, the spoiling problem becomes severe, and because of the nature of the spoil the pressure will tend to make the spoil squirt out from the bottom.

Q Is there equipment using a double cast, or more than one cast, which can strip more than 125 feet of overburden?

A Technically, yes, as distinct from economically.

Q What are the present technological limitations—

What, at present, is the greatest amount of overburden which can technically be removed?

A In copper mines, small shovels and trucks hauling the overburden away, there are no real limits, technically.

Q I am referring in coal mining, with a single piece of equipment.

MR. HEDLUND: Well, now, may I have the question back, so modified?

Or would you restate the question.

MR. CUSACK: Yes.

[122] BY MR. CUSACK:

Q What, at present, is the maximum overburden in a coal mine which can be removed by equipment now available?

MR. HEDLUND: May I have that back, please?

Q (Read by the reporter.)

MR. HEDLUND: Are you confining, in your definition of coal, to bituminous coal, or are you also including sub-bituminous, lignite and brown?

MR. CUSACK: Bituminous coal.

THE WITNESS: Are you referring to the tri-state area?

MR. CUSACK: No, sir. I am referring to anywhere.

THE WITNESS: Are you referring to a single piece of equipment without assistance?

MR. CUSACK: Yes, sir.

BY THE WITNESS:

A Then I believe the effective limit would approximate 100 to 120 feet, depending somewhat on the type of overburden.

BY MR. CUSACK:

Q What is the maximum overburden now being [123] removed in the tri-state area of Illinois, Indiana and West Kentucky, that is, the Eastern Interior Coal Province?

A Probably 160 to 170 feet, but this is not accomplished without rehandling of overburden, which involves additional cost.

Q And, sir, what mine in the Eastern Interior Coal Province is now removing overburden at 165 feet?

A I could mention that the Homestead Mine of Peabody in West Kentucky is stripping to such depths to recover multiple seams.

Q Multiple-seam thickness.

A That is right.

Q How far from the surface of the land is the first seam, the seam closest to the land?

MR. HEDLUND: Closest to the surface?

MR. CUSACK: Thank you.

BY MR. CUSACK:

Q Closest to the surface.

A Probably up to as much as 70 feet.

Q In regard to single-seam mining operations, strip mining operations, in the Eastern Interior Coal Province, what is the deepest overburden now being removed? Do you know?

[124] A Again, probably 100 to 120 feet. The limitation is not only technical; it is economic.

Q And, sir, at what single-seam operation in the Eastern Interior Coal Province is overburden being removed at 120-foot thickness?

A I would say a mine such as River King.

Q Can you think of any others?

A Well, that one comes to mind.

Q Is River King economically profitable?

A Yes, it is.

Q I understand, Mr. Weir, that the Paul Weir Company counseled the Humble Oil Company in regard to the opening of its new mine at Carlinville, Illinois, is that correct, sir?

A Not strictly correct. We did make studies for Humble of mining costs for some of their reserves in Illinois, including the reserve where they eventually decided to open a new mine.

Q And did you assist—

A We drilled these reserves for them, and then proceeded with a mining cost and a capital cost for them, and subsequently they decided to open a mine.

* * * *

[131] Q Will it increase the cost of mining underground coal?

A Yes, it will.

Q Do you have any idea of approximately what percentage increase in costs mine safety legislation will result in?

A I certainly wish I did. The whole coal industry is trying to assess that.

Q What is your assessment of the range of the increase in cost?

A I just don't have any meaningful basis for any opinion.

Q Assuming, sir, a continued situation of short supply of coal, continued increased demand of coal, and assuming increased costs of underground mining due to mine safety legislation, do you anticipate that strip coal reserves heretofore thought to be uneconomical may become economical?

MR. HEDLUND: May I have that question back, please?

Q (Read by the reporter.)

BY THE WITNESS:

A Well, sir, I think that question is answered broadly in our report, when we project a peaking in the [132] total production of strip coal in the Midwest here within a few years, for the reason that we do not think that

these strip reserves are going to be economically minable. Investment costs will be so high that underground coal, with a lesser investment cost, will take the brunt of the expansion, and there will be a tremendous expansion underground, and a peaking-out on the start of it, a climb, in strip mining. This is despite this health and safety.

I think the figures are shown in our study, in our report, that each point of overburden is very significant in terms of investment costs and costs of strip mining.

MR. CUSACK: I have no further questions.

I want to thank you, Mr. Weir.

MR. HEDLUND: Could we take a break for a few moments?

MR. CUSACK: Yes.

* * * *

[3]

EXCERPTS FROM DEPOSITION OF
S. SMITH GRISWOLD, TAKEN AUGUST 19, 1969

* * * *

S. SMITH GRISWOLD,

called as a witness by the plaintiff herein, having been by me, the said Frances B. Spina as Notary Public aforesaid first duly sworn, was examined upon oral interrogatories and he did thereupon depose and testify as follows:

DIRECT EXAMINATION

BY MR. EISEN:

Q Will you state your name, please.

A My name is S. Smith Griswold.

Q What is your address?

A This is 1660 L Street, N. W., Washington, D. C.

Q Where is your home?

A My home is at 1310 27th Street, N. W., Washington, D. C.

Q By whom are you employed?

A I am employed by Seversky Environmental Dynamics Research Associates, commonly known as SEDRA.

Q Have you been asked to testify in behalf of the defendants in this litigation?

[4] A I have been asked, or the firm has been asked, to prepare a report in connection with this case.

Q Well, isn't it your understanding that you are expected to give testimony?

A That I might be expected, yes. That is right.

Q You say it is your understanding that you might be expected to, or—

A Yes. To prepare a report and give testimony. That is right.

Q Just in one sentence, what is the nature of that report?

MR. KEMPF: I am going to object to that. If the

witness does not feel that it can be adequately explained in one sentence, I certainly would encourage him to go beyond it; or if the question is too broad, to perhaps ask for a more specific question. But if he can handle it in one sentence, I certainly have no objection to him doing so.

BY THE WITNESS:

A Well, the title of the report is "Impact of Sulfur Oxide Regulations on Midwest Coal Markets." [5] That might be a reasonable explanation, a short one. I think it goes a little bit further than that, but—

BY MR. EISEN:

Q Yes. I will get into that a little later.

A All right.

Q Is it Dr. Griswold?

A No, it isn't.

Q How long have you been with—

What was that abbreviated expression?

A SEDRA.

I have been with this firm since last September 1st, 1968.

Q And what is your position with SEDRA?

A President.

Q What does SEDRA do?

A We are consultants to various clients, which include state governments, local governments, industrial organizations, public utilities. That just generally covers it.

Q How many employees does SEDRA have?

A We have at the present time, Mr. Eisen, six full-time employees.

Q What are their professions or training? Do you know?

[6] A Yes. Two of them are engineers, specializing in sanitary engineering, one of them is a technical writer and analyst, one of them is an instrument and engineering technician, and one of them is secretarial, and myself.

Q How long has SEDRA been in existence?

A Just since September of 1968.

Q Are you one of the persons who formed the organization?

A Yes, I am.

Q What did you do prior to forming this organization?

A Immediately prior to that, I was Assistant Director of the National Air Pollution Control Administration under Mr. MacKenzie, and more lately under Dr. Middleton. That was for three years, starting October 4 of 1965.

Prior to that, for eleven years, from 1954 through 1965, I was the Air Pollution Control Officer of Los Angeles County Air Pollution Control District.

Q And if you want to go back prior to that time and tell us what you did then.

A Immediately prior to that, I was an officer [7] in the Navy during the Korean War, for two and a half years; prior to that, I was the Assistant Administrative Officer of the County of Los Angeles; prior to that, I was in World War II; prior to that, I was an efficiency engineer with the Chief Administrative Office of the County of Los Angeles.

Q Would you tell us your educational background.

A I am a graduate, cum laude, from Stanford University, and I have a Master's Degree from Stanford University.

Q In what—

A Governmental Administration, Mr. Eisen.

Q As opposed to Science?

A Political Science and Economics was my minor. My graduate degree was in Governmental Administration.

Q Would you repeat for me again, please, what your title was during those eleven years—

Was it with the City of Los Angeles?

A No. It was the County of Los Angeles. Air Pollution in California is a function of County Government, operating under a State Enabling Act, whereby an Air Pollution Control organization can [8] be activated, and its rules and regulations have the force and effect of State law, in a County, for instance.

Q And what was your task? What were the duties of your office there?

A Well, I started—as you might imagine, it seems a little odd for an administrator to be running a technical engineering organization.

I had returned from the Korean War, and it was in 1954 that the lid blew off, politically, on air pollution or the smog problem in Los Angeles, and the elective officials were very concerned because the public reaction was very bad.

I had set up and reorganized many governmental departments during this population explosion there, so I was very experienced in organizing both line operations and staff operations, so they sent me to find out why so much money had been spent and the smog was getting worse.

In the course of that study I traveled extensively, visiting all the Air Pollution Control agencies throughout the United States, and then started a careful investigation, which was rather unusual, because the County Counsel and [9] myself were sworn in, as Deputy County Clerks, to take sworn testimony from the 127 employees of the Air Pollution Control District.

There had been some appearances before the Grand Jury which indicated that there was misfeasance or malfeasance, and while it wasn't considered sufficient to bring out formal charges, yet they wanted a thorough investigation on an administrative basis, which meant cross-examining 127 people to find out what was happening to the program and why it wasn't going, but none of the charges appeared justified. And following this—

Q Excuse me. May I interrupt for a minute?

A Sure.

Q You say misfeasance or malfeasance. Was this on behalf of the officials, or industry?

A No; the employees of the Air Pollution Control District, whether they conducted themselves properly in all cases. This was more on the order of an administrative hearing, Mr. Eisen.

Following that, a complete reorganization and a build-

up of the air pollution control function of the county government was justified, and during that period, 1954, while I was running the organiza- [10] tion, reorganizing, I spent a year looking for someone to run it, and no one would touch it because of the fact that they felt it was a job kind of like the manager of the old Kansas City Athletics.

There had been four previous Air Pollution Control officers in the period of 1948 to 1954, and no one wanted to take the job. The pay was right, but the longevity was poor. So just gradually I backed into this. I couldn't find anybody to touch it, so I became more and more acquainted with this, more and more interested in it, and found it much more challenging, and in the period from 1954 to 1957 this organization was built up, engineers trained of every type except civil, instruments were developed, and electronic data processing and the first air monitoring systems set up.

In 1957, I had a \$4,350,000 budget, which was more money than was actually spent by all the other government agencies, including the Federal Government, combined.

Successively, over the years, I have testified, I think, on every bit of Federal Air Pollution Legislation, including the original [11] Public Law 159.

Out there in Los Angeles, nearly every year, we did about a million dollars worth of research work, original research work, with the scientific back-up, under a director of research, and this was just a heavy load to carry, you know, at the expense of the property owner, so it was to our advantage to promote, in every way possible, the Federal Government getting into the research field, because we felt that air pollution, as a coming thing out there—because of the meteorology, it would hit there most severely—a lot of work had to be done, particularly with regard to the effects of air pollution on health, and we weren't at all qualified to do that. We knew how much contaminants were coming out of where, and we knew considerable about the reaction of the contaminants that go into the atmosphere, but we had no expertise at all, nor did anyone, in determining

at what levels and under what conditions air pollution affected the health of the individual.

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[13] The latter part of this time in working on the automobile, I became involved with the Department of Justice in connection with having them look into the possibility of the "big four" companies becoming involved in violation of the Antitrust Act, which is the case that Bernie Hollander took over from Sam Flatow.

Q The El Paso Natural Gas?

A No. I was a Government witness, or I was subpoenaed, on the El Paso Divestiture in Salt Lake. I can't remember what year.

Q What is this "big four" case? I am not familiar with it.

A The case is still pending, the Federal Grand Jury case, and it was held in connection with product fixing by the automobile manufacturers. It is a case that Mr. Flatow carried on for several years, under—there was a Chief of the Antitrust Division whose name started with the letter "O."

Q Orrick?

A Orrick. Orrick was there at the beginning, Mr. Zimmerman was there, and I think the last person [14] I talked to, in Antitrust, was Mr. Turner. I have never discussed it with Mr. McClaren, but I have with Mr. Bernie Hollander, who has the case now. It is still pending. It has been going on for quite a few years.

Q Did you determine at any time what percentage of the air pollution in Los Angeles was caused by the automobile, the motor vehicles, as against other means of pollution?

A Oh, yes. We kept, Mr. Eisen, a very careful analysis—in fact, we had a little pamphlet.

(There was a short interruption, after which the taking of the deposition was resumed as follows:)

BY THE WITNESS:

A Because of the very stringent regulations that have been placed in effect and enforced on Los Angeles, which is the third largest industrial complex in the country, the automobile, tonnage-wise, is responsible for around

87 per cent of the total amount of tonnage of air pollution. However, this is rather comparing oranges and carrots. I mean, a large portion of this, of course, is carbon monoxide, a large portion of it is hydrocarbons, and [15] about half of the oxides of nitrogen come from motor vehicles. These are either toxic gases or precursor—end up by being toxic gases.

.

[20] Q How far away would you say the nearest coal field is from Los Angeles.

[21] A I would say 700 miles. It is shorter than where we bring the gas from, which is Texas, the Permian Basin, El Paso line.

Q You mentioned that sulfur dioxide accounts for a certain percentage of air pollution emissions.

A Yes.

Q What are the approximate percentages of pollution emissions, if you know, say in the Chicago Metropolitan Area, accounted for by sulfur dioxides, carbon monoxide, et cetera?

A I wouldn't know, tonnage-wise.

I know that in my responsibilities with the Federal Government—of course I came back here as an enforcement officer; you know, as someone who had taken about 10,000 people to court, with a record of 96.6 per cent convictions over that period of time.

I was brought back here when the Federal Government started its control program, at least my title was for enforcement and control, and I had several responsibilities here which I originally set up and staffed, set up the laboratories, and one of the original ones was to meet with the Executive Officer of the President, Bureau of [22] the Budget, to develop the program for controlling Federal facilities.

It was very strongly believed that before the Federal Government entered into any kind of enforcement program, in states or in connection with industry, that they should set an example themselves, and hopefully that example would be followed by state and local government agencies, and they in turn would carry on this program with industry.

But in connection with that, one of the original studies we made—and Mr. High was one of my staff who was in charge of this—was the Three-City Sulfur Study, where we studied the sulfur levels in New York, Chicago and Philadelphia; and in connection with the Federal facilities, how much control the Federal facilities of those three areas should have on the fuels that they used in the buildings that they operated, the various types of facilities, and this was regardless of which department operated them; and out of that we developed a program to control the fuels, set limits on the sulfur in the fuels burned, and an overall general limit for the United States as a whole, but more stringent regulations for those three cities.

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[34] Q Are you familiar with the Perry and Fields paper on coal and sulfur dioxide pollution?

Perry is the Director of Coal Research for the Bureau of Mines, at least he was.

A Yes. I know him personally.

MR. HEDLUND: May I have the question, please.

Q (Read by the Reporter.)

BY THE WITNESS:

A I have read many of his papers, naturally. He has, over the years, done a lot of work on that.

However, in connection with the prepara- [35] tion of the report, Mr. High and my staff put that together, and I am not intimately acquainted with all the details of it.

MR. EISEN: Would you read the answer, please.

A (Read by the Reporter.)

BY MR. EISEN:

Q I take it the report you are referring to is the "Impact of Sulfur Oxide Regulations on Midwest Coal Markets," prepared by Seversky Environmental Dynamics Research Associates in connection with this case?

A Yes, Mr. Eisen.

Q You indicated that Mr. High had contributed to the preparation of this report.

A Yes.

Q Were there other persons who contributed to the preparation of the report, besides yourself?

A Mr. LiPuma and Mrs. Beeland.

Q What are their positions?

A One, as I mentioned before, is Assistant Engineer to Mr. High, and Mrs. Beeland is our analyst and technical writer.

Mrs. Beeland has been with the Western [36] Oil and Gas Association for fourteen years, here in Washington, and is very well acquainted with many source materials, including Interior and NAPCA. She also worked for me when I was out at the National Air Pollution Control Administration.

Q Were there areas of primary responsibility delegated to these persons you named, in putting this report together?

A Yes.

Q Could you describe for us, say by looking at the Table of Contents, or any other way that you care to describe for us, the manner in which the responsibilities were delegated?

A The research on the recent regulations in affect in various cities and areas, together with insuring that they were current, and keeping in touch with subsequent pending developments that might occur, were Mrs. Beeland's responsibility.

The material generally on coal processes and the stack gas cleaning operations were generally in Mr. High's area of expertise.

Q And Mr. LiPuma?

A Mr. LiPuma assisted Mr. High.

.

[40] Q Do you mean as distinguished from the burning of coals?

A From the burning of coals, that is right.

But in those areas, while I am not intimately acquainted with the levels, I know that they are extremely high. They are extremely high in mid-city; they are extremely high under certain operating conditions. I would consider that two per cent sulfur coal will be found to be high in that St. Louis area.

I think inevitably, if coal continues to be burned in that area, it will have to be down to one per cent. This is what the control officials are going to want.

I think in Kansas City—now, this is just a little bit over to the other side there. Now, there, two per cent coal might be acceptable for a while. But like all other things—I am sure that you, working for the Government, understand this—a control official, with the responsibility for public health, has to look forward to what he is going to do when; and reasonably, like in industry or anything else, he should look forward to what he wants to accomplish ten or fifteen [41] or twenty years from now.

* * * *

[54] BY THE WITNESS:

A I would say definitely they would, Mr. Eisen, have to develop methods to desulfurize the coal or clean up the stack gases.

BY MR. EISEN:

Q Do you have an opinion on whether or not such methods will be developed?

A I have had knowledge of methodologies to clean up coal and oil, residual oil, for quite a few years. I was slightly interested in this in 1954 and 1955 in Los Angeles, on residual fuel oil.

Now, there, in that area, on trying to clean up residual fuel oil, multiple programs or equipments were built, two of them, to my knowledge, cost well over a million dollars, and it failed, and they had high hopes.

A very famous professor, Dr. Haagen-Smit, internationally known, was going to make fertilizer out of the stack gases, ammonium sulfates. It could be done with burning coal.

There have been many, many suggestions by the coal industry and the oil industry that have been worked on. As of right now, I don't know— [55] and I am acquainted with several, as you know from this report—of any that is going to be on-stream in a large electrical power generating complex that will be economically acceptable within, I would say ten years, maybe more, where these processes are refined to a point where they are going to be generally available for new power plants burning coal, or the planning of them.

Q Is it your testimony that it would be within ten years or more?

A I would say ten years or more.

Q Would you say about ten years, based on your knowledge and experience with the residual fuel oil research?

A I would say more.

Now, methodology has been developed, Mr. Eisen, in connection with desulfurizing fuel oil by hydrogenation. It is a very expensive process. It gets more expensive the lower you want to get the sulfur in the fuel oil.

Q How expensive is it?

A Well, it ranges. It can go as high as a dollar a barrel, if you wanted to get it down real low, 42 gallons. It has run, on not getting [56] it quite so low, 35 cents a barrel, which is fairly good.

. . . .

[87] Q Getting down to some of the concretes, though, they have been using a pilot system at Union Electric, have they not, for the past—they started it last year? They are testing out a system of dolomite and wet-scrubbing?

A Oh. This is the Combustion Engineering application. Yes, they have been using that. They have had it for the past year. I think its operating time during all that period of time was 31 days.

Q That is right. Well, I didn't suggest, sir, that this was a presently operating system, but they are down to the point of at least using it to that extent, and they plan—

A To that extent, with a lot—

Even Combustion Engineering, which is a very, very fine firm, and very qualified in the field, admits that they are a far, far cry from an installation on a major power plant.

Q Well, if—

A They have corrosion problems, they have every kind of a problem. They have got so many problems they didn't think about, that they haven't [88] gotten around, in some cases, to figuring out what the answers are to things they planned to determine in this study.

Q Well, from what I have read in their study, I don't believe I recall them using any expression like

"far, far cry" away from something. They admit that they have problems.

I would like to ask you if you can tell me from where you get this information that they are far, far away.

A Well, "far, far," might be carrying it too far. If I said one "far" for ten years to a commercial application, that is what I would say by "far, far."

Q But did they say they are ten years away from a commercial application?

A No. I wouldn't expect them to.

I would also submit that I have seen other applications, far less complex, with just the obvious problems that they have; the type of stuff they are dealing with, the volume of the stack gases, the economics of this. I would say that if you gave them limitless money and guaranteed them a market, they could go ahead, and on a crash basis, like [89] getting to the moon, or something, they could get this thing through in a shorter period of time.

* * * *

[147] MR. HEDLUND: Mr. Eisen, I want to point out, in just the hopes of trying to shorten this, that that is shown on the face of the table, if you will look at the asterisks and the legend at the bottom.

MR. EISEN: Do you know the question, Mr. Griswold?

THE WITNESS: No. I would like it repeated.

MR. EISEN: Will you read the question, please.

Q (Read by the Reporter.)

BY THE WITNESS:

A It pertains to those marked with an asterisk.

BY MR. EISEN:

Q So in each instance where there is an asterisk—

A This makes it possible to—

You will notice that all of these are described as maximum allowable sulfur content by weight, rather than allowable emission rate.

Now, where the asterisks are, it is an [148] emission standard, where the conversion was made from one to another.

A regulatory agency has to make a decision, when it drafts its regulations, for instance in connection with fuels, whether you are going to limit the sulfur in the fuel—regardless of what type of fuel it is—or whether you are going to limit the emission from the combustion of that, what comes out of the stack.

Now, there are very good arguments both ways, but most Control Officials will, by reason of the effective implementation and enforcement of this limitation, limit the sulfur in fuels. This is easy to police. You go around and pick up a sample, run it through a lab analysis, you determine the amount of sulfur in the fuel. Conversely, it is extremely difficult to police what comes out of the stack. A lot more parameters are involved, not only the sulfur in the fuel, the emission characteristics, but the actual physical problem of analyzing the stack sample, climbing the stack, taking a sample.

We do that here, and when we do it, we charge a client anywhere from, depending on the [149] stacks, from \$1,000 to \$9,000. It means, in several cases, scaling the stack, putting in probes, and carrying instruments around; and it is an almost impossible regulatory process.

Now, as we get on closer down the line to where you are getting effective scrubbing or stack-cleaning devices, we may have to come to this, but as of the present time there hasn't been any. And while people are writing regulations in these terms, of how much comes out of the stack, on the basis that you don't need to be concerned with what goes into the boiler; you have just got to be concerned with what is coming out of the boiler, why, Control Officials are going to have to be faced with this, to determine whether that equipment is operating close to design and meets these limits, whether it is being maintained, whether it is corroding or falling apart; I mean, all those characteristics that make the difference between what you are permitted to put out of that stack and what you are actually putting out.

Now, I made the decision one way. I made it because—and others are still making [150] it today. They are limiting the sulfur in the fuel, and that is because there is no present adequate method for cleaning the stack gases of sulfur dioxide, or of anything else that I know of. There are ways of doing that. You use an after-burner on solvent vapors, which are combustible, but you can determine an operating efficiency on that, and if there is very little deterioration factor. But here you don't have corrosion problems, you don't have a lot of other problems. It is just an easier way to implement this type of regulation.

Q Referring to "Chicago," on page 14, Table 2, there are three dates there: July 1, 1970, July 1, 1971, and then January 1, 1973, with three different percentages of maximum allowable sulfur.

Do you know whether those dates are accurate as of today?

A I believe they are, Mr. Eisen. They are the same.

Q On the same page, in the next to the last paragraph, you refer to reports of various state air pollution agencies.

[151] MR. HEDLUND: What page are we on, Mr. Eisen?

MR. EISEN: This is on page 16.

BY MR. EISEN:

Q In the paragraph beginning "Without exception," from whom did you get this information?

A We got these by contacting the cognizant officials in each area.

Q Minnesota, Wisconsin, Michigan, Iowa, Missouri, Illinois, Indiana, Ohio, Kentucky, and Tennessee?

A Yes.

Q And it says they "report varying stages of activity in developing new sulfur dioxide standards or revising old ones."

A Yes.

Q What is the trend, if any, that you were concerned with?

A The trend is toward more stringency.

Q More stringency in the sulfur in coal, or the emission—

A Standards.

Q —standards?

[152] Pardon me?

MR. KEMPF: Off the record.

(There was a discussion off the record, after which the taking of the deposition was resumed as follows:)

BY MR. EISEN:

Q Has the trend been toward more stringent standards in the control of the amount of sulfur in the coal, or in the control of the amount of sulfur oxide emissions, or both?

A I would say more stringent control of sulfur in fuels or sulfur in emissions, depending on which way they write the regulations, but it means more stringent control anyway.

Q Maybe I didn't—I know that my question wasn't clear now.

What I am getting at: Is there a trend toward permitting the utilities, or the coal user, to use high-sulfur content fuel, so long as he controls the emission of it? Is there such a trend?

MR. HEDLUND: Do you understand the question, Mr. Griswold?

THE WITNESS: Well, I think I have an idea of it.

. . . .

[187] Now, in terms of operating costs, the 10 [188] per cent relates to the cost of operating the power plant, and this is an additional burden, this 10 per cent, of operating costs.

MR. EISEN: I see. That clarifies it. Thank you.

BY MR. EISEN:

Q In figuring operating costs, on page 43 there is a table, Table 5, which is headed "Projected Costs for 800 Megawatt Flue Gas System."

Did you calculate, or is it possible to calculate, what the cost per Btu for these various techniques would be, based on the figures that are present on Table 5?

Did I say cost per million Btu? That is what I meant to say.

A This is cost per kilowatt potential produced, and we didn't calculate—

These figures here, Mr. Eisen, came from the individual developers of control equipment. I would consider them quite conservative, because probably by the time these go on stream, you know, and all the developmental work is done, and application, it would be much more than this.

These figures which were taken, like [189] Combustion Engineering—the alkalized alumina adsorption of the Bureau of Mines, this has been dropped completely now. They are no longer funding this.

And Monsanto, these are Monsanto's figures; and these are Wellman-Lord's figures.

Q By "these," you mean Nos. 4 and 5 are Monsanto's and Wellman-Lord's?

A That is right.

Q But how about No. 1, "Limestone Injection"?

A I don't recall where we got that.

THE WITNESS: Do you remember, Mr. High?

MR. HIGH: I do not. I am sure it would have come from the TVA report that we referenced earlier. I don't know of any other reference that would have gotten into that kind of cost detail.

BY THE WITNESS:

A The TVA is the one that has gone into all of the dolomite limestone research work, both wet-scrubber type and the dry-particle type, where they take the particulated out with electrostatic precipitators.

. . . .

[211]

CROSS EXAMINATION

BY MR. KEMPF:

Q Mr. Griswold, I now hand you what has been marked as Griswold Deposition Exhibit 2, and I ask you if I have correctly identified the document.

A Yes, you have.

Q Is that the report which you prepared concerning this case?

A It is the report we prepared for you.

Q And is that the report which we have been discussing today?

A Yes, it is.

Q Mr. Griswold, are the opinions and conclusions reached in this report true and accurate to your best knowledge, information and belief?

A Yes, they are.

Q Do you personally, and the organization of which you are President, SEDRA, stand behind the opinions and conclusions reached in this report?

A Yes, we do.

Q During the course of your examination by Mr. Eisen, you mentioned that you had consulted with the Antitrust Division of the Department of [212] Justice concerning some automobile pollution control equipment.

You discussed this rather lengthily, but you mentioned very briefly the fact that you had also been subpoenaed as a witness in the El Paso Divestiture case. Was that subpoena by the Department of Justice?

A Yes, it was, as a Government witness.

Q Were you subpoenaed to testify concerning air pollution matters?

A Yes. In connection with natural gas usages in Los Angeles. However, I should add, to save people looking up the record on this: After spending two days in Salt Lake City, the Department of Justice attorneys decided it wasn't worthwhile going any further with the testimony because they felt that the Judge had made so many errors in procedure, admission of evidence, and other errors in the case, that whatever decision he came

up with would be reversed, so they were just going to appeal it.

Q During your direct examination, you discussed some of the breakdowns for the preparation of the report and some of the steps taken. [213] I have a few additional questions in this regard.

First, and Mr. Eisen may have covered this already, regarding the various existing legislation and proposals concerning new or revised legislation which is being considered.

Did you contact various state and local Air Pollution Control Officials so that you would be sure that your information was the most up-to-date available?

A Yes, we did. And to maintain liaison so that any pending legislation or action would be reported.

MR. EISEN: Are you meaning the organization, or Mr. Griswold?

THE WITNESS: The organization, it should be.

MR. EISEN: I think the record will show that Mr. Griswold did not contact them.

BY MR. KEMPF:

Q By "you," I was referring to SEDRA.

A Yes.

Q In connection with the preparation of the report, did you contact the various manufacturers of the five processes discussed in Part II C of the [214] report?

A We did, or people having cognizance and knowledge of the procedure, including TVA and NAPCA.

Q Were on-site inspections made of some of the processes in connection with the preparation of this report?

A Yes, they were. Not all, but some of them.

There are some processes there where you had to—in the case of Wellman-Lord, where the process was classified and you had to sign a document not to reveal anything in regard to it, in order to see it, so as we couldn't do this, we didn't see that.

Q You said you also discussed these processes with officials at NAPCA?

A That is right.

Q You mentioned this morning that the Federal amount of money budgeted for research into possible means of limiting the amount of sulfur emissions from various coal-burning facilities was currently approximately 15 million dollars per year.

A That is right.

[215] **Q** On page 43 of Griswold Deposition Exhibit No. 2, there is a table entitled "Projected Costs for 800 Megawatt Flue Gas System."

I notice that the Monsanto system, for example, the cost of putting that system on one facility would substantially exceed NAPCA's entire budget for this area for an entire year, is that correct?

A That is correct.

I think I also mentioned that about 20 million dollars is probably a very conservative figure, that this figure would undoubtedly be higher at the time of its construction if present trends continue, plus undoubtedly some problems will require, such as corrosion, more expensive materials.

In connection with the 15 million dollars, I would like to add one thing: I think this is an appreciable sum as compared to what has been spent in the past. However, it is obvious from such a comparison as this, that it isn't the kind of an expenditure alone, unless this were considerably supplemented by other funds, where you would expect a crash program on developing effective flue gas [216] control system.

MR. EISEN: Off the record.

(There was a discussion off the record, after which the taking of the deposition was resumed as follows:)

MR. KEMPF: I will indicate for the record that when I was referring to the cost, I was referring to the capital cost alone, as set forth in the middle column on page 43.

MR. EISEN: Thank you.

BY MR. KEMPF:

Q This morning, Mr. Griswold, you said that you would be optimistic also, concerning the timetable for

the development of desulfurization techniques if you were in Dr. Middleton's job. What did you mean by that?

A I meant that, if I were the administrator of that program and had the responsibility for supporting such a program and for appropriation committees on either side, that I would be inclined to be as optimistic as he is.

I think this, at least as far as NAPCA is concerned, is kind of rather a built-in deal.

. . . .

[219] Q Turning to the Nomograph on page 15 of the report, you indicated during your direct examination that this was developed by Mr. High. When was this developed?

A I believe I said that it was developed in connection with the "Three Cities Sulfur Dioxide Study," in connection with the sulfur levels for New York, Chicago and Philadelphia.

Q This is when both you and Mr. High were with NAPCA?

A Yes. This was when I was supervising the development and implementing the control of the Federal Facilities Program, and Mr. High was on the staff, with full responsibility for this study.

By "this study," I mean the "Three Cities Sulfur Study."

Q During the course of your direct examination, you testified to a trend toward more stringent air pollution regulations.

My question is: Are you familiar with any area where the legislative or Air Pollution Officials have enacted air pollution regulations which were less stringent than existing regulations?

A In other words, where they liberalized their regulations?

[221] Q Yes.

A No, I don't.

MR. KEMPF: I would like to have the Reporter identify, as Griswold Deposition Exhibit No. 3 for identification, a report of the Secretary of Health, Education,

and Welfare to the Congress of the United States, entitled, "Air Pollution by Federal Facilities," and dated January 1968.

(The document was thereupon marked Griswold Deposition Exhibit 3 for identification, 8-19-69.)

BY MR. KEMPF:

Q I now hand you what the Reporter has marked as Griswold Deposition Exhibit 3 for identification, and I ask you if I have correctly identified it.

A Yes, you have.

Q Are you familiar with that report?

A Yes, I am. This was prepared under my direct supervision when I was in charge of the Federal Facilities in the Air Pollution Control Program.

[222] Q Are the opinions and conclusions and statements in this report true, to the best of your knowledge, information and belief?

A Yes, they are.

MR. KEMPF: I ask the Reporter to mark for identification, as Griswold Deposition Exhibit No. 4, a document entitled "Second Report of the Secretary of Health, Education and Welfare to the United States Congress." And it is entitled "Air Pollution Abatement by Federal Facilities," and it is dated January 1969.

(The document was thereupon marked Griswold Deposition Exhibit 4 for Identification, 8-19-69.)

BY MR. KEMPF:

Q Mr. Griswold, I hand you what has been marked as Griswold Deposition Exhibit No. 4 for identification, and ask you if I have correctly described the document.

A Yes, you have.

Q Are you familiar with this document?

A Yes, I am.

[223] Q Mr. Griswold, I ask you to turn to page 5 of the report. The second paragraph reads:

"A summary of these reports reveals that 442 remedial actions were reported for 387 installations, located in 45 States, the District of Columbia, Puerto

Rico, and Guam. With few exceptions, the remedial actions fall into the following categories:"

Then turning to category 4, which is entitled "Reduction of Sulfur Oxide Emissions from Heating Plants by:"

I ask you what are the two remedial actions indicated.

MR. EISEN: I object to the question as not being confined to the area covered by the complaint.

MR. KEMPF: Is counsel willing to withdraw all exhibits which he is introducing, or has indicated he might introduce at trial, which contain information relating to areas outside of the Midwest?

MR. EISEN: I am just confining my objection to the form in which I expressed it.

MR. KEMPF: In light of that, I will ask [224] the witness to answer the question.

BY THE WITNESS:

A Well, it is listed here under a. and b. (Reading):

"a. Using same type of fuel but of lower sulfur content.

"b. Converting to a different fuel of lower sulfur content."

BY MR. KEMPF:

Q Does the report indicate any remedial action involving the installation of desulfurization equipment?

MR. EISEN: Same objection. The matter is not confined to the area covered by the complaint.

MR. KEMPF: Of course, Mr. Eisen, I would point out to you that the report encompasses the entire area which is the subject of the litigation, and if there were none for the entire country, I believe it is safe to assume that there were none within this area.

BY MR. KEMPF:

Q I repeat my question, Mr. Griswold, which is: [225] Does the report indicate any remedial action by Federal Facilities involving the purchase of desulfurization equipment?

A No, it doesn't.

Q Does it indicate any remedial action involving the construction of taller stacks?

A No, it doesn't.

I think I ought to make it clear, though, that upon the issue of this report I had been relieved of my responsibility for Federal Facilities by Mr. Megonnell my deputy; and since this was a report to Congress in connection with the efforts under the overall program, we couldn't go any further in connection with what actually could be done as of this period at this time, beyond the two methods that existed here, which were covered in a. and b.

MR. EISEN: Could I have that last question read, please.

(The record was thereupon read by the Reporter as above recorded.)

BY MR. KEMPF:

Q Why did you feel you could not go beyond these two methods?

[226] **A** Because there wasn't equipment developed to a point where they could be physically applied.

Q Turning to page 1 of the report, Mr. Griswold, the first sentence of the "Introduction," talks about the emphasis in The Air Quality Act of 1967 on Federal leadership in the control of air pollution.

What is the aim of this leadership?

A I think I brought this out the other day with Mr. Eisen, where I mentioned that it was expected that the Federal Government would set an example for other governmental agencies, and ultimately for industry and the citizens and taxpayers, in connection with action on air pollution control, to clean up the air pollution problems that existed, and it was felt that it would be unreasonable to expect action by other activities under the leadership of the Federal Government until they cleaned their own house, and this program was designed with that purpose in mind.

. . . .

[239] Q To what extent were they adopted?

[240] A State-wide.

MR. EISEN: Excuse me. I renew my objection to the line of questions as being irrelevant and immaterial to the issues in this case.

BY THE WITNESS:

A They were adopted state-wide in New Jersey for the northern and southern portions, with the exception of, I think, three counties on the sea coast and three in the mountainous area.

BY MR. KEMPF:

Q Do you anticipate state-wide regulations in other areas?

A I believe that you are going to have state-wide regulations similar to those, generally.

If you don't have a state-wide regulation, you are going to have industries moving out into the rural areas, the less urbanized areas, and subsequent dislocation of your industrial developments. I feel that this probably won't be acceptable from the standpoint of the area that is losing the industry because of the severity of their controls, plus the fact that you will see a wide range of local regulations which are designed to keep areas, which are now clean, from being polluted. And there is a potential, if you [241] don't do this, of having in the one state many different standards and regulatory activities that could be more stringent than the state standards set for the Air Quality Regions, because of the fact that there will be developed a local non-degradation of the atmosphere tendency trend.

Q Are your comments applicable to states throughout the Midwest?

A I think the same thing would apply in any state. I think it is logical that people who have what they consider to be a very nice, clean place, from an air pollution standpoint, in which they live, not to want to see this deteriorate.

MR. KEMPF: I have no further questions.

REDIRECT EXAMINATION

BY MR. EISEN:

Q Referring to Griswold Deposition Exhibit 2 for identification, the title of that document contains the phraseology, does it not, "Prepared for Kirkland, Ellis, Hodson, Shaffetz & Masters, Prudential Plaza, Chicago, Illinois, Re: United States v. General Dynamics et al"?

A Yes, it does, Mr. Eisen.

* * *

[260] Q Since the fall of 1967, has the Antitrust Division of the Department of Justice had the benefit of your views concerning air pollution matters in connection with the automotive proceed- [261] ing?

A Yes, they have.

Q How recently have you discussed air pollution matters with the Antitrust Division of the Department of Justice?

A I would say probably within the last four months, with Mr. Bernard Hollander, who now has the assignment of this case under Mr. McClaren.

MR. KEMPF: I have no further questions.

REDIRECT EXAMINATION

BY MR. EISEN:

Q In that connection, your association has been confined, has it not, to the emissions from automobiles?

A No. It has been in connection with—I have no objection to telling you about it.

Q May I rephrase the question?

A Surely.

Q It has not had anything to do with coal?

A No.

Q One further question or clarification—

MR. KEMPF: Mr. Eisen, if you are going to withdraw your prior question, I intend to ask it.

* * *

[3]

EXCERPTS FROM DEPOSITION OF
BRUCE C. NETSCHERT, TAKEN AUGUST 20, 1969

.
BRUCE C. NETSCHERT,

called as a witness by the plaintiff herein, having been by me, the said Frances B. Spina as Notary Public aforesaid first duly sworn, was examined upon oral interrogatories and he did thereupon depose and testify as follows:

DIRECT EXAMINATION

BY MR. FUTTERMAN:

Q Please state your name.

A Bruce C. Netschert.

Q What is your address?

A My home address is 1913 Martha's Road, Alexandria, Virginia.

Q By whom are you employed?

A I am employed by the National Economic Research Associates, Incorporated.

Q I think for purposes of future reference, we will refer to that organization as NERA, if that is all right with you gentlemen.

Would you please explain what NERA is and what are its functions?

[4] A NERA is a firm of consulting economists, whose clients include both private industry and various Government bodies. Three major areas of specialty are utility economics, antitrust economics, and the economics of energy and minerals.

Q These three groups that you just mentioned, are these areas of special interest for NERA?

A They are of special interest, and also they constitute the major portion of our work, of our business.

Q Would you please give us briefly your educational background?

A I received a B.A. degree in Geology from Cornell University in 1941, and a Ph.D. degree in Economics, from Cornell University also, in 1949.

Q For how long have you been employed by NERA?

A Since 1961.

Q And briefly, what was your employment experience prior to 1961?

A After receiving my Doctor's degree I taught for a year and a half, Geology and Economics at the University of Minnesota, Duluth Branch.

[5] I then came to Washington, and for a period of five years I served consecutively with the Bureau of Mines, the President's Materials Policy Commission, the National Resources Security Board, and the Office of Defense Mobilization, and my final Government position was with the Central Intelligence Agency.

Following that, I took a position on the staff of Resources for the Future, Incorporated, which is a Ford Foundation-sponsored educational foundation in the field of natural resources, conservation, and was with them for five years prior to my joining National Economic Research Associates.

Q Would you list for us some of your publications?

A I am the author of "The Future Supply of Oil and Gas," and the co-author of "Atomic Energy Applications with Reference to Underdeveloped Countries"; "Energy in the United States Economy, 1850-1975"; and "The Future Supply of the Major Metals." These are the books which I have written or have been co-author of. In addition, I have many publications of articles and speeches and chapters in books.

[6] Would you list for us some of the major articles that you have written which deal with energy fuels?

THE WITNESS: May we go off the record for a minute?

MR. FUTTERMAN: All right.

(There was a discussion off the record, after which the taking of the deposition was resumed as follows:)

BY THE WITNESS:

A I shall provide you a copy of my bibliography in answer to that question.

MR. FUTTERMAN: Thank you.

MR. HEDLUND: I might add, though, at this point, that the bibliography does not have a breakdown, does it, of articles relating to energy fuels as opposed to other topics?

THE WITNESS: No. It is a complete bibliography, but from the titles it would be apparent which are relevant and which are not.

BY MR. FUTTERMAN:

Q Dr. Netschert, I understand that you [7] are going to be a witness in the case of United States versus General Dynamics Corporation, et al., is that correct?

A That is correct.

Q And you have prepared a report and some charts in connection with that testimony, is that correct?

A No, that is not correct wholly. I have prepared a written summary of my expected testimony, together with supporting tables and charts, but I would not call it a report.

Q Have you had any prior experience or have you testified in any other cases on the subject of energy fuels?

A Yes, I have.

Q In which cases?

A Well, I have testified before the Federal Power Commission since 1961 in every one of the so-called Area Rate Proceedings, having to do with the regulation of the field price of natural gas, and I have also testified in connection with certain pipeline applications for that same body.

I have testified in Federal Court on various matters, all involving energy companies, [8] and I have testified before Congressional hearings and departmental administrative hearings on energy matters.

Again, I could supply you with a list of these, if you desire.

Q Yes. I would like such a list.

Does the summary of testimony that you prepared, and of which we have received a copy, contain a summary of all the testimony that you are expected to give in the case of United States versus General Dynamics, et al.?

A Yes, I believe that is correct, in the sense that all of the points, all of the conclusions that I would expect to draw, are contained in this document.

MR. HEDLUND: Not to mislead the Government, I want to point out that we may ask Dr. Netschert at trial to comment upon some of the testimony to be adduced by the Government. This of course would be in the nature of rebuttal testimony rather than as in our case in chief.

BY MR. FUTTERMAN:

Q Dr. Netschert, I would now like to direct [9] your attention to the part of the summary of your expected testimony entitled "Interfuel Competition." I believe that is page 1 of the total summary.

I would like to specifically direct your attention to the first sentence, in which you say:

"In the period since World War II coal has been a decreasingly effective competitor in the following markets: railroads, home and building heating, and industrial users of fuel for heat and electricity generation."

I ask you: What do you mean by the phrase "decreasingly effective competitor"?

A I mean by that to describe the inability of coal to maintain its position as the dominant fuel in these use categories. At the beginning of the period it was in such a dominant position, and over the course of the period this position has either disappeared entirely in certain instances or has been seriously eroded by the encroachment of competing fuels.

. . . .

BY MR. FUTTERMAN:

[10] Q Isn't it true that there are very few [11] coal-burning locomotives still in operation in the United States today?

A That is correct, and that is an instance, I would say, in which they were doomed no matter what they tried.

Q In the home and building heating market, how has the coal industry tried to maintain its market?

A They cooperated with the furnace manufacturers in developing stokers and other equipment and improving the performance and design of home furnaces to make them more attractive to the user, and this represented a deliberate and conscious effort to preserve what they could of that market.

Q When did these efforts take place?

A They took place I think mostly in the early part of the period since World War II.

Q Are these trends also true for the Midwest, as you have used that term throughout your report?

A Yes. I would say so.

* * *

[13] Q The decline of coal's position in the railroad market and the home and building heating market and in the market for industrial users of fuel, and the fact that coal's position in the [14] utility market is increasing, or the fact that the utility market is now the mainstay of the coal production, as you put it.

A If I can take each of these individually.

Q Yes.

A I would not expect a continuation of the past trend in the railroad market because there is no market left for it; therefore, that is a finished chapter.

I would expect a continuation of the decline of coal's position in the home and building heating market, and also in the industrial use market.

As for the utility market, I would expect that coal's present dominant position in that market would be increasingly eroded by nuclear energy. I would not expect that the past encroachments of the hydrocarbon fuels would continue at the same rate and to the same degree as has been true over the past decade or so.

Q In the second paragraph on the first page of the summary of your expected testimony, you state "This is demonstrated by the attached tables."

[15] Which of the attached tables were you referring to for support of the statements made in the first paragraph?

A Table 2, Table 3, Table 4, Table 5, Table 6, Table 9, Table 10, Table 11, Table 12, Table 13, Table 14, Table 15. I believe that is it.

MR. HEDLUND: May I have those Tables back, please.

A (Read by the Reporter.)

BY MR. FUTTERMAN:

Q Directing your attention now to Paragraph B on page 1, and specifically directing your attention to the second sentence in that paragraph, which states:

"The utility market is predominant, but in this as well as all other markets there is strong competition from the other fuels."

Would you please explain what you mean by the phrase there, "strong competition from the other fuels"?

A I mean by that that either a competing fuel is actually taking business away from coal producers or it is in a position to do so if cer- **[16]** tain changes in relative prices and other market considerations were to occur. In other words, it is either an active competitor or a latent competitor.

Q In your opinion is gas one of the fuels that would be either in the position of an active competitor or a latent competitor?

A Yes, it is.

Q What about the same in respect to oil?

A Let me make sure what we are talking about. First, we are talking about the Midwest as I have defined it.

Q That is correct.

A Second, we are talking about the utility market only.

Q That is correct.

A The position of oil relative to the position of gas, I regard it as a less serious competitor in this area and in this market category.

Q Would you please tell us the basis for your statement, first in connection with gas, and then the basis for your statement in connection with oil?

MR. HEDLUND: I am not quite clear what—

[17] Well, may I have his two statements back.

You are talking about his prior answer?

MR. FUTTERMAN: That is correct.

(The record was thereupon read by the Reporter as above recorded.)

BY THE WITNESS:

A I think, really, I can answer it best if I take them together.

The major basis for the distinction I make between the position of the two of them is the matter of relative availability. We are talking here about the use of residual fuel oil, the heavy fuel oil, by utilities, and the availability of that is completely limited by the capacity of the local refineries—that is, the refineries within this area or contiguous to it—to produce this material. The long-term trend in this country is away from the production of this material, and the middle portion of the United States is one of the areas in which this has proceeded farthest. The nature of resid is such that its inland transportation is severely limited in distance, and in fact it can be trans- [18] ported at all only on water. This means, then, that not only is the fundamental supply of it limited by a lack of productive capacity, but that its market area from any given source is further limited by transportation problems.

Now, gas doesn't suffer from this, in the sense that it depends on the productive capacity of a processing facility. Its limitation is solely in terms of the quantity that has been discovered and developed and the transmission capacity to bring it to the place where it can be burned. This limitation I consider to be of a wholly different order of magnitude compared with the limitation surrounding the supply of residual fuel oil.

One further point is that the use of gas by utilities has fitted very well into the marketing activities and structure of the gas industry by enabling the pipelines and distributors to maintain their use factor at a high level—I am referring to the interruptable use of gas, in other words—

and this has been one of the reasons for the increase in the use of gas by the utilities, and the larger availability of [19] gas in general means that it is there, potentially for further use by utilities.

BY MR. FUTTERMAN:

Q At the present time would there be any problems of transmitting the required amounts of gas which would be necessary to serve Midwest utilities, should Midwest utilities currently consuming coal decide to switch to gas?

MR. HEDLUND: I am going to ask, Mr. Futterman, and perhaps this is an appropriate time to do it, what we are talking about in terms of "the Midwest." Are you referring, since Dr. Netschert has referred to what he means by "the Midwest" as being from what the Government has provided us in terms of a description of the Midwestern States or the alleged Eastern Interior Coal Province and the Eastern Interior Coal Sales Area.

I think it might be helpful at this point, if we are going to use "Midwest," to refer to those states, to have an identification of those spread upon the record so that we can all be certain what [20] we are talking about in terms of "the Midwest."

* * * *

[22] MR. FUTTERMAN: Now, I am sure everyone has lost sight of my original question. Will you read it back, please.

(The question was thereupon read by the Reporter as follows:

"**Q** At the present time would there be any problems of transmitting the required amounts of gas which would be necessary to serve Midwest utilities, should Midwest utilities currently consuming coal decide to switch to gas?")

BY THE WITNESS:

A If all of the present coal consumption by Midwest utilities were replaced by gas, the situation would be an impossibility; that is, it would call for the delivery of so much gas that it would exceed the capacity of the existing pipelines.

BY MR. FUTTERMAN:

Q So then is your testimony that it would be impossible for all of the Midwest utilities currently consuming coal to immediately convert to gas?

A An overnight conversion would be impossible, [23] yes.

Q Do you have an opinion as to how long it would take to construct sufficient pipeline facilities to accommodate such a changeover?

A Normally, it could be done within a year.

Q Do you think that there are sufficient reserves of gas available at the present time to permit such a changeover? And I am speaking now only of the Midwest.

A May I ask how you are using the word "reserves"?

Q Well, that is a very complicated term, Dr. Netschert, as you so aptly described it in one of your books.

I think, for purposes of this question, I would define "reserves" as quantities of gas available, known to be available at the present time, for consumption purposes.

MR. KEMPF: May I have the original question read back, please.

(The question was thereupon read by the Reporter as follows:

"**Q** Do you think that there are sufficient [24] reserves of gas available at the present time to permit such a changeover? And I am speaking now only of the Midwest.")

BY THE WITNESS:

A Yes, as you have defined it.

BY MR. FUTTERMAN:

Q Would that require certain consumers of gas in other areas of the country to be without sufficient quantities of gas to meet their consumption requirements?

A In the terms in which you have posed the situation, I do not believe it would.

Q When you speak of utilities consuming gas, are you speaking of interruptible gas or firm-rate gas?

MR. HEDLUND: May I have the last question, please.

heating market, would not the gas distributor be hurting its competitive position in the home heating market?

A The answer is that the circumstance you pose is self-contradictory and totally unreal, because gas sold on an interruptible basis has no effect on the supply available in the home heating market, because the very interruptibility is a recognition of the fact that the home heating market has priority, and it does not affect the amount going to the home heating market. When the home heating market needs it, in periods of peak demand, the gas to the utilities is cut off, and that is the interruption.

* * *

[38] Q Do you have an opinion as to whether or not nuclear energy eventually will displace coal entirely as an energy source for Midwest utilities?

A Yes, I do.

Q What is that opinion?

A I believe that eventually it will.

Q When will this take place?

A I think the answer to that depends, more than anything else, upon the date of the perfection of the commercial breeder reactor.

Q And why is that displacement dependent upon the date of the development of the breeder reactor?

MR. HEDLUND: May I have that question, please.

Q (Read by the Reporter.)

MR. HEDLUND: By "that displacement," you are referring to the complete displacement?

MR. FUTTERMAN: Of coal by nuclear energy.

BY THE WITNESS:

A Because it is only with the breeder reactor that nuclear power will be able to capture [39] the real cost savings that are inherent in nuclear energy, in nuclear power generation.

The very large increase in efficiency of the breeder reactor compared with the present generation of burners, plus the substantial credit for the fuel created by the reactor, plus, still further, its even greater economies of scale, all mean that for nuclear power to attain absolute dominance it will have to be through the breeder re-

actor and not through the present reactor designs and technology.

BY MR. FUTTERMAN:

Q Is it your testimony, then, that the present nuclear reactors being placed into operation and on order for the next ten years or so will not be capable of completely displacing coal as an energy source for electric utilities in the Midwest?

A They very definitely will not. I think that in each instance, that is, for each plant added to the systems in that area, it will be a question of a specific decision between the nuclear route and the fossil fuel route, and some of those will go nuclear, and some will go fossil fuel.

Q And these plants of which you are speak- [40] ing, these are plants which will be placed into operation to complement existing generating capability, will they not?

A Well, both complement and replace.

Q Do you have an opinion as to the rate of increase for electricity consumption in the United States during the next ten or fifteen years?

A Yes.

Q Would you please give us that opinion?

A I think that it will by and large continue at the long-term historical rate, which has averaged around seven per cent per annum. This is the rule of thumb in the industry.

Q Do you believe that trend will be prevalent in the Midwest?

A I see no reason why it should be significantly different. No reason why it should be precisely seven per cent, either, but—

Q Do you have an opinion as to whether or not coal consumption by electric utilities in the Midwest will increase or decrease or stay about the same during the next fifteen years?

A I think it will increase, but at a slower rate than it has been increasing in recent [41] years.

.

[43] Q Are there any estimates as to whether or not the appropriate geological conditions exist in the Midwest for using geothermal energy to generate electricity?

A There are no appropriate geological conditions for surface manifestations to appear. The closest such manifestation is at Hot Springs, Arkansas. But the known geology does not preclude the occurrence of such subterranean geothermal energy at greater depths than have been probed for oil and gas in that area.

Q Would it be your testimony that at the present time geothermal energy cannot be considered a competitor of coal in the Midwest for purposes of generating electricity?

A Yes.

Q Would you briefly explain the concept of pumped storage?

A Pumped storage is the use of two reservoirs at different elevations and the mov- [44] ing of water between them. The reservoirs can be either natural or artificial.

During the off-peak period in electricity demand which occurs every night, the excess capacity of a power system is used to power pumps which pump the water from the lower reservoir to the upper reservoir, and then during the peak demand periods of the daytime, this water falls back down to the lower reservoir, and in the same machines which did the pumping, generates electricity as in the normal hydro operation.

Q I will come back to that later.

I would now like to direct your attention to paragraph B on page 2, and the first complete sentence appearing on page 2 states:

"Through the technique of 'total energy' or 'on-site generation gas is definitely a competitor and oil may be."

Would you please explain what you mean by that sentence?

A I mean by that that the gas industry is engaged in a highly aggressive promotion campaign to get total energy installations throughout the country. This cam-

paign takes many forms and in- [45] volves a good deal of money and many companies in the industry. In contrast, the oil marketing end of the industry has been comparatively passive. It is just as feasible, it makes just as much economic sense, to use oil as the energy source as it does gas, but the oil industry has not been as aggressive in marketing, and that is what I meant by comparing one as definitely a competitor and oil may be, in the sense that any time they get the idea that they can make as much out of this as gas, they can go ahead and do it.

Q I think it might be helpful if you would explain what you mean by the term "total energy."

A Total energy is the term used by the gas industry to refer to the same thing that the electric industry calls "on-site generation."

This is the installation of a generating unit at the site of consumption, which may be an apartment house, a motel, a school, a shopping center, any energy user of that type. The installation satisfies all the electricity requirements of the complex that it serves. The waste heat from the turbine for the deisel engine that drives the generators is used for heating and cooling, [46] both space heating and refrigeration and water heating, supplemented, if necessary, by direct use of the fuel for this purpose, so that the total energy needs of the complex are satisfied by this installation; hence the name.

Q Are there any facilities in the Midwest which use coal for purposes of on-site generation?

A I know of none in the United States or anywhere else.

MR. HEDLUND: May I have that question and answer back, please.

(The record was thereupon read by the Reporter as above recorded.)

THE WITNESS: Can that be physically struck? I just misunderstood your question.

MR. FUTTERMAN: Just elaborate on your answer.

BY THE WITNESS:

A I misunderstood your question, and the answer should be:

Yes, there are. There are no total-energy installations that are fueled by coal, but there are industrial installations which generate their own electricity with coal.

* * * *

[52] MR. FUTTERMAN: I will rephrase the question.

BY MR. FUTTERMAN:

Q Do you know what percentage of the total electricity generated in the United States is accounted for by the use of the technique of total energy?

A I do not have the figure, but I know that it is a very small percentage.

Q Would that percentage hold true for the Midwest States?

A I have such a figure in one of my exhibits.

Q Yes.

A And again, it is small.

Q I direct your attention to the first complete paragraph on page 2, which is still part of the subheading B, which states:

"In sum, the competitive situation within the energy markets as a whole is already more fluid than it has ever been before and will [53] become still more fluid in the future."

Would you explain what you mean by that, sir.

A I mean that the competition is today more severe, more keen, among the fuels and between the fuels and electricity, and that the intersubstitutability is also greater than it has been before, and that both this competition and this intersubstitutability is likely to increase in the future, that the choice facing the consumer is wider than ever before and will become still wider.

Q By use of the word "consumer," do you include therein electric utilities?

A No. I meant the ultimate consumer of energy, that is, the consumer of energy either as electricity or as fuels.

Q Well, do you consider electricity to be a primary source of energy?

A No. It is a secondary source, or it can even be a tertiary source.

Q What do you consider to be the primary sources of energy?

A The primary sources are the fuels, hydro- [54] power, solar energy, geothermal, tidal, and such.

Q So that when you were speaking of competition between primary sources of energy, this is different than the competition that exists at the secondary level of energy consumption, is that correct?

MR. HEDLUND: May I have that back, please.

Q (Read by the Reporter.)

BY THE WITNESS:

A Well, I had not employed this distinction between primary and secondary in either the summary of my expected testimony or in any of the tables. I had used the term, I believe, "interfuel competition," and by that I refer to two things at one and the same time: First, interfuel competition *senso stricto*, that is, competition among the fuels; but also competition between the fuels and electricity. If you want that put now in terms of primary and secondary sources, it embraces both at the same time.

* * * *

[68]

DIRECT EXAMINATION (Continued:)

BY MR. FUTTERMAN:

Q Dr. Netschert, do you have an opinion in regard to the role that mine-mouth generation plants will have in permitting utilities to cope with air pollution controls?

A Yes.

Q Would you state that opinion for us, please.

A I think that in the immediate short term the ability to site new stations at the mine mouth rather than in the load centers would tend to relieve the pressure on the utilities with respect to sulfur limitations, because of the present status of such regulations in concentrating on metropolitan areas. However, I also think that the clear tendency is toward the eventual adoption of such metropolitan standards as state-wide standards, so that in the longer term this will have no helpful effect.

[69] Q When you speak of state-wide standards, are you including in that statement sulfur limitations of the coal being burned?

A That is what I had in mind, yes.

Q Dr. Netschert, do you have an opinion as to whether or not the impact of measures to abate air pollution can be translated into decreases or increases of consumption of the various fuels by electric utilities?

A Yes, I do.

Q Would you state that for us, please.

A Well, as I previously indicated, I think that the impact of the sulfur aspect of air pollution regulations is to place coal at a competitive disadvantage, and this stated otherwise would mean that there would be a tendency to turn to other fuels as a means of coping with such regulations—gas, oil and nuclear.

To answer your question specifically, I would say that the net effect would be to tend toward an increase in the consumption of these other fuels at the expense of coal consumption.

.

[74] Q Have you made any studies of the added costs which you expect will result from the necessity to employ particulate controls?

A No, I have not.

Q Have you made any studies as to the availability of low sulfur coal in the Midwest?

A No, I have not.

Q You say that the increasing stringency of air pol-

lution regulation over the coming decades is inevitable. What do you mean by that statement?

A I mean two things: First, it is already clear that the regulations that have been adopted to date generally contain within them a timetable which provides for increasingly severe limitations on sulfur content or on emission standards.

Secondly, it is clear, as I have said before, that I think that the metropolitan standards will tend to be adopted state-wide. For example, New York has done this, and I believe some other states, but I can't recall specifically at present.

Thirdly, there appears to be a tendency to push toward an ultimate sulfur content limitation that will be even lower than those currently provided for in regulations. For example, regula- [75] tions that currently call for .5, I would expect to see eventually going down to .3 or .37.

And finally, I believe that the increasing scale of fuel use, by everyone, not just the utilities, as part of our growth in population and economic size, will call for this action on the part of the authorities.

Q Do you expect coal to be consumed in the Midwest during the next twenty years?

A Yes.

Q Well, in view of your statements concerning the unavailability of low sulfur coal, how can coal be consumed in view of the restrictions such as the one that you have just mentioned?

MR. HEDLUND: May I have the question, please.

Q (Read by the Reporter.)

MR. HEDLUND: Are you referring, Mr. Futterman, to all statements that this witness has heretofore made on this record with respect to the availability of low sulfur coal?

I am not aware that Dr. Netschert has said that low sulfur coal was unavailable, period.

[80] Q I now direct your attention to Part II of the summary of expected testimony, entitled "Structural Changes in the Post-World War II Period," and I would

like to direct your attention to a statement which appears under sub-heading 1, [81] paragraph b:

"The industrial market for coal has failed to keep pace with industrial growth."

Upon what do you base that statement?

A Well, in addition to my general knowledge, I base it on some of the tables that I have.

Q Would you indicate those tables for us?

A Yes. Table 2, Table 3, in a less direct sense Tables 4 and 5, Table 11; Table 12, Table 14. I believe that is it.

Q And I would like to direct your attention to sub-paragraph d, which states:

"As a result of the above changes and of changes in the scale and technology of power generation, the major emphasis in coal marketing has increasingly emphasized large quantity, long-term contracts, and Btu content, chemical and physical characteristics."

Upon what facts do you base that statement?

A On my general knowledge of the electric utility industry, and on the results of the research I have done in this field, on discussions with my colleague, Mr. Gerber; and to the extent that it [82] has not been specific research, on my following of the technical literature, that is, the periodicals and professional journals concerned with the production and utilization of fuels.

* * *

[84] Q Would you state that for us, please.

A In my opinion there is a range within which such characteristics or parameters can vary, but this is, for practical purposes, very narrow and constitutes an effective constraint on the ability of the utility to use whatever might be available purely in terms of what could be transported to it at a reasonable price.

Q In your opinion is it possible to design a boiler so that it will be able to consume varying grades and qualities of coal?

A Yes. I believe it certainly is possible to design a boiler that could burn a wide range, but I do not think

such a boiler would be suitable for utility use, or for any use in which high temperatures are employed, really high temperatures.

Q Do you have an opinion as to whether or not it is possible to adjust a boiler so that it may take types of coal that had previously been impossible to burn in that particular boiler?

A Yes. I believe that there is a certain degree of such flexibility, if you want to call it that, but again I would consider it, in my opinion, [85] to be a limited flexibility, limited both in the physical sense and in the cost sense.

Q Is it your opinion, then, that as a general rule utilities tend to design boilers that consume a narrow range of coals?

A Well, whether or not the utility designs the boiler—it might be the equipment manufacturer. But utilities tend to specify parameters, for the plants they build, that call for boilers that can tolerate only a very narrow range, and indeed it could even be only a specific coal.

Q Do you know of any specific examples where utilities in the Midwest have installed boilers which are designed to take only one specific coal?

A No. I have no such specific knowledge.

Q In your opinion, do the coals in Illinois differ from the coals in Indiana and West Kentucky?

A Well, I don't know whether I would say they differ from those coals any more than they differ among themselves. There is a variation in coals even within the State of Illinois. But I would not be prepared to say that there is a certain specific difference, no. I am not that [86] familiar with the characteristics of the coals in question.

* * *

[88] Q Isn't it true that during 1968 the quantity of gas consumed exceeded newly discovered reserves?

A Yes. That has happened before, too.

Q It is my understanding that that was the first time it had happened since the American Gas Association had been keeping statistics.

A Since 1947, that is the first time, yes.

Q And that situation has also existed in the oil industry for some four or five years, has it not?

A Well, there has been a more or less rough balance between annual consumption and annual addition to crude reserves in oil.

Q Directing your attention to page 4 of the summary, what do you mean by the phrase, "a substantial increase in scale," which is contained in the sentence carrying over from page 3 and concluding at the top of page 4?

A Part of the basis for that—which is what I think you want, isn't it, the basis for it?

Q Yes. The basis for it, and also what you mean by it.

A Well, to answer both at once, Table XXVI shows the average production per mine for all mines [89] of 500,000 tons of production or more, and for the 50 largest mines.

(There was a short interruption, after which the taking of the deposition was resumed as follows:)

BY THE WITNESS:

A (Continuing) This shows, in terms of the index numbers, in Columns (4), (5) and (6), that all mines, on the average, have increased their production by something more than 30 per cent, comparing the beginning and end years, just for convenience; that the mines producing 500,000 tons or more have increased their production by something approaching 40 per cent; and that the 50 largest mines have almost doubled the size of their average output over the period. Now, I consider such changes to be substantial.

In addition, the announcements and figures describing the scale of the new large mines being put into production currently or in the next few years, shows that they are in some instances larger than any other mine ever put into production in this country, and in general at the very top end of the size scale. I interpret this, [90] to me it means, that there has been a substantial increase in general in the scale of coal-mining operations, and that it has been concentrated at the highest end of the size categories.

BY MR. FUTTERMAN:

Q This chart, of course, covers the United States as a whole, does it not?

A That is correct.

Q And there would be no way by which you could make any determinations with respect to Midwest mines by an analysis of this chart, isn't that correct?

MR. HEDLUND: May I have the question, please.

Q (Read by the Reporter.)

BY THE WITNESS:

A That is correct. Referring to this chart alone, you could not deduce anything specific about the Midwest.

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[92] Q How would you define the difference between reserves and resources?

[93] A Well, here the significant difference is whether or not they have yet been discovered.

Q And resources have not yet been discovered?

A Yes. There is a further distinction, too, but the significant one here is that.

Q Directing your attention to page 1 of the report, in paragraph B you state that, "nuclear fuel . . . will constitute an evermore serious competitor in the coming decade."

On what do you base that statement?

A Well, on two things: One, now that its commercial feasibility has been demonstrated; that is, now that nuclear plants have been in operation, have been on line, and have been fitted into the operations of electric systems, the utility industry has the confidence that is necessary for a wide-spread adoption of such a completely new technology. Therefore, compared to what it has been, the use of nuclear power would naturally then be greater.

Secondly, I think that small-scale individual refinements in nuclear technology should help in obtaining reductions or in fore- [94] stalling increases in nuclear power costs, which should enhance the competitive position of nuclear power in general; that is, it is a new technology, and being a new technology the opportunities for improvement in it are greater than they are in, say conventional power

technology, which has some eighty years of history, and a good deal of the big gains possible there, in conventional technology, have already been milked.

Q In your opinion have we had sufficient performance experience to know what to expect from nuclear generating stations in terms of their operating performance?

A We have, in this relatively small size of the initial generation. By "generation" here, I mean time, vintage of plants.

We have not yet had such experience, no, with the new larger size units that are now being constructed or ordered.

This is, again, one of the reasons why, as I said earlier, I think that in each instance it will have to be a choice made between the two for each particular plant that a utility wants to build. They cannot take it for granted that if [95] they go the nuclear route they will come out ahead.

Q Well, before we have such experience, in your opinion can we estimate whether or not the competition of nuclear fuel with coal will be sufficient to hold the growth rate in coal during the next ten or fifteen years?

A Do you mean to hold down the growth rate of coal?

Q Yes.

A Yes, I would say so, for this reason, that that well might not be true if that were the only element present, but when you combine it with the air pollution pressures, I think that it tends to offset this disadvantage, so to speak, of the lack of operating experience.

The utilities are being pressured in this direction, too, you see. By the air pollution regulations they are being pressured toward the nuclear side.

Q Well, won't the utilities be faced with pollution problems caused by the discharge of heat into the water when nuclear plants are constructed?

A Most assuredly; exactly that.

What they do, it is a sort of frying pan- [96] into-the-fire business.

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[97] Q Well, if the functional breeder reactor is not available, let's say until beyond 1990, will this cause any problems to the use of nuclear fuel as a source for generating electricity?

A It could, yes.

Q And is that because of the fact that there may not be sufficient quantities of low-cost uranium available?

A That is one of the things, yes. But again, this is not an absolute fact; it is an unknown in the sense that there is at present no indication that there will be, but, again, there is no indication that there cannot be. The opinion is generally that it is unlikely to be.

Q Do you have an opinion as to whether or not the percentage of nuclear plants currently on order actually indicates the inroads or the extent to which nuclear power has made inroads on coal's markets?

[98] MR. HEDLUND: May I have that question, please.

Q (Read by the Reporter.)

BY THE WITNESS:

A Well, to answer your question as you phrased it, the answer is yes, in the sense that every nuclear plant built can be taken to be an encroachment on coal's markets, since coal is the dominant fossil fuel; that is, we can assume that every plant that has already been ordered as nuclear will, if it gets far enough along before it is too late to cancel because of current short-term delays, will be a plant that is nuclear instead of what otherwise would have been coal.

But I think what you meant by your question was, is this an indication of the pace of encroachment we can expect in the future; because this other thing is a sort of direct conclusion.

Q That is my next question.

A The answer to that question is: I don't think it is, no. I think this was a short-term spurt at a far higher rate than is likely to prevail over the longer term. It was sort of a jumping on the bandwagon, so to speak. The result was a [99] clogging of the production facilities, and there simply must be some reaction to that, in the sense that there will be a slow-down in the next year or two, in order to get the pipeline unclogged. After that, I think there will be an increase again in the level of nuclear orders, but that rate will not be the rate that we have experienced, say in 1967 and 1968.

Q Is one of the reasons for this fact the fact that costs of nuclear plants have increased very significantly in the last year or two?

A Well, one of the reasons has been the simultaneous increase in kilowatt costs, that is, construction costs, because of the increase in the level of construction labor wages, for example, which came at the same time that we had experienced a very high interest rate, and that combination has had a deleterious effect.

It has been still further aggravated by the combination of production delays and regulatory delays at the AEC. But I think all of these things have happened to come to a head at once, and all of them will be ameliorated over the coming years; that is, I don't think we are going to see continuing high [100] interest rates, we are going to unclog the production facilities, and the AEC is simply going to have to speed up its approval process because it is now so apparent what it is doing to the industry, and—well, I can't say so much about the construction costs. They may continue to go up.

[104] Q By "minimum specifications," you are referring to the ash content, the moisture content, the sulfur content, and so forth, is that correct?

A Yes. And in addition, if you want to broaden the connotation of "quality," such things as alkalinity and fusion characteristics.

Q Directing your attention to sub-paragraph 6, on page 4, and in particular sub-paragraph a., it states:

"The increased competitive pressure on coal in the utility market has led to increased pressure on the railroads to offer lower rates."

What is the source of the increased pressure which you are speaking of in that sentence?

A Do you mean source in the sense of reason, or source in the sense of who puts the pressure on?

Q Who is exerting that pressure?

[105] MR. HEDLUND: Shouldn't you identify, Mr. Futterman, which pressure you are referring to?

BY MR. FUTTERMAN:

Q I am referring to the second, "increased pressure on the railroads." Who was pressuring the railroads?

A The coal producers, because the coal producers can do only so much in holding down the cost of their product in the face of the increased wages, the wage bill they have to pay.

Once it leaves the mine, the delivered price is as much influenced by the transportation costs as it is by the production costs, and the railroads have as much interest in maintaining a large coal business as the coal producers have in selling coal. This has been pointed out to the railroads, and they have been reminded of it repeatedly and forcibly by the producers.

Q Are there any other sources of pressure which might induce the railroads to offer lower transportation rates?

A Well, if you are thinking of the railroads alone, yes, the pressure of competing modes [106] of transportation.

One magnificent example, of course, is the first coal pipeline which was put into operation in Ohio. It was a success in the sense that it delivered the coal at a lower cost than the railroad freight, and the railroads thereupon lowered their rates, under the cost of the pipeline, and the pipeline was closed.

The threat of such a pipeline from somewhere in the Midwest—I can't remember where—to the East Coast was sufficient to result in a reduction in freight rates to the East Coast.

But in the more conventional sense, where you have the alternative of barge, that constitutes pressure too.

Q Directing your attention to page 5 of the summary, sub-paragraph B on that page, in reference to the statements contained in sub-paragraph B do you have any opinion as to the minimum amount of production which would be required to open a mine in the Midwest at the present time?

MR. HEDLUND: I think I will have to have that back.

. . . .

[119] Q Now directing your attention, Dr. Netschert, to Table IV, can any generalizations be made from this table in regard to Midwest trends?

A Yes.

Q What would they be?

A That they would not be significantly out of line with the general trends shown here.

Q Well, isn't it true that the Midwest area is a greater coal-consuming region than other areas of the country, such as the far west and certain areas of the southwest?

A It is a greater coal-consuming region than some regions, yes. I am not sure it is of all regions. I don't think it would be, for example, for the Appalachia states.

But to answer your question on this table: To be sure, coal probably had a higher regional position here to begin with than it did for the country as a whole, and yet here also it suffered inroads from the hydrocarbon fuels, which is generally what this table shows, and that is [120] what I meant by saying there wouldn't be any significant difference.

* * *

[138] Q Well, was that the only communication [139] that you had with the Federal Power Commission?

A Yes, I believe so. It was just a telephone communication.

You see, the FPC does publish figures on pumped storage projects as part of other documents, but you cannot rely on them to be absolutely complete as of the date you are looking at them.

Q Dr. Netschert, based on the statistics contained in Table XIII, do you now consider pumped storage to be in competition with coal in the Midwest?

A At present, not in any significant sense, no.

Q I would now like to direct your attention to Table XV. In connection with this, I would like to ask you what the purpose of this report is.

A Report?

Q Chart. Excuse me. Table. What is the purpose of Table XV?

Q Well, the purpose here is to show that although, as I have stated, utility use is coal's largest market and its

strongest growth market, even here the use of coal has not kept pace with [140] total power generation. In other words, the growth of coal use in utilities has not kept pace with the growth of utility output.

Q Well, wouldn't that same statement be true for the other fossil fuels?

A Over this period? Is that what you have in mind?

Q Yes.

A No, it would not be true, because there has been a great upsurge in the use of gas.

Q You are talking now in terms of an index, and isn't it true that the increase in an index—strike that.

A Well, there is another aspect, too. You are considering the competitive side, and that is one thing. One of the reasons coal hasn't kept pace over this period is because of the increased use of gas. Another reason, which would apply to gas as well as to coal, is that there has been increased efficiency in the use of the fuels, and for that reason alone it wouldn't keep pace with the growth in generation.

* * * *

[151] Q I was asking that question without reference to air pollution standards.

The question is: Are you aware of any areas in the Midwest where there are consumers who desire coal at the present time but are unable to get sufficient quantities for purposes of their [152] consumption

A No, I am not aware of it.

MR. FUTTERMAN: Off the record.

(There was a discussion off the record, after which the taking of the deposition was resumed as follows:)

BY MR. FUTTERMAN:

Q Dr. Netschert, I direct your attention to Table XXII, entitled "Percentage of Total Coal Production Mechanically Cleaned, and Refuse as a Percentage of Raw Coal, 1947-1967." What is the purpose of this chart?

A This is to illustrate the fact that as part of the changing pattern of coal consumption, and as part of the rise of the utility market to dominance, the coal industry

has been forced to prepare—which is the term it uses—an ever-greater percentage of the coal it markets, in order to meet the requirements of the utility market.

Q In your opinion, are significant quantities of raw coal consumed by electric utilities in the Midwest?

A I know that there is such consumption. I don't know the quantities, so I couldn't say [153] whether or not it is significant.

Q But whether or not these quantities are significant, that would not be apparent from this table, is that correct?

A That is correct.

Q Directing your attention to Table XXIII, entitled "Annual Average Value of Coal Per Ton, F.O.B. Mine, Average Railroad Revenue Per Ton, and Indicated Average Delivered Cost Per Ton, 1947-1967," would you explain for us the significance of this chart?

A The significance of this table is two-fold: First, it shows that the transportation cost of coal is a substantial portion or fraction of the delivered cost. This is not unique to coal, but it puts coal in a rather special category of basic commodities, as one in which transportation cost is so high, roughly around 40 percent of the delivered cost.

Secondly, it shows that both the coal producers and the coal haulers, the railroads in this instance, have contributed to helping to keep down the cost of coal to the user. And of course this has been an element in coal's competi- [154] tion with the other fuels.

* * * *

[156] BY MR. FUTTERMAN:

Q Dr. Nerschert, I direct your attention to Table XI—

MR. HEDLUND: We are going back to Table XI?

MR. FUTTERMAN: Yes.

Off the record.

(There was a discussion off the record, after which the taking of the deposition was resumed as follows:)

BY MR. FUTTERMAN:

Q In regard to what I will call the revised Table XI, can you tell us the purpose of this chart?

A This is to give an indication of the way in which coal has suffered from competition in the non-utility market for steam coal in the eight states which we have labeled the Midwest.

The index numbers show that only in two states, in Kentucky and Wisconsin, was the level of coal use, in the non-utility consumption, higher in 1967 than it was in 1957; whereas gas is greater in every state, and that increase over the ten years has been ranged from 60 per cent to almost four times; [157] and oil has a greater consumption in 1967 than 1957 in every state but one.

So this indicates that coal has lost out, in this market, to gas and oil, in this geographic area.

Q This chart does not show tons consumed or barrels consumed or million cubic feet consumed for coal, oil and gas respectively, isn't that correct?

A That is correct. It shows only the relative changes in consumption for each year with respect to the first year.

Q Well, isn't it true that such a presentation might, in some cases, indicate a greater increase than has really taken place in terms of barrels consumed or million cubic feet consumed?

A Well, it doesn't show a greater increase; it merely shows that if the absolute level, in terms of quantities, was low in the base year, then a relatively small increase in absolute terms could lead to a relatively high number here.

That has happened, for example, with respect to Kentucky in the use of oil. We see a very marked increase in the past few years. [158] Now, this is not because Kentucky suddenly turned to oil in a great big way; it is that the consumption of oil in Kentucky in this market was, in absolute terms, relatively small to begin with.

But nevertheless, I should make one further point, and that is that over the period the total non-utility consumption of all fuels, the total of all fuels, has increased, and so coal has lost out in maintaining its relative share in that market.

Q I would now like to direct your attention to Table XII, where we once again return to total energy.

MR. HEDLUND: What makes you think, Mr. Futterman, that we have ever left it?

MR. FUTTERMAN: Well, it is hopeful that by this time we all understand what it means.

* * *

[171] BY MR. FUTTERMAN:

Q I might add that it probably does sound familiar, because I believe you were the author of that statement.

MR. HEDLUND: Well, since you both know, it might be nice to put it on the record as to from whence it comes.

MR. FUTTERMAN: I believe it comes from page 23 of Dr. Netschert's book.

BY MR. FUTTERMAN:

Q Do you still have that opinion, Dr. Netschert?

A Yes. What I am saying there is exactly what has happened since I wrote the book, and I had forgotten that I had that opinion that far back.

The fact is that coal's total consumption has grown over this period, and it has grown because of the growth of the utility market and despite any further inroads into these other markets that gas and oil may have made.

Q Dr. Netschert, do you have an opinion as to the extent to which nuclear power plant costs have increased in the past three years?

[172] MR. HEDLUND: Are you talking nationally?

MR. FUTTERMAN: Nationally, yes.

BY THE WITNESS:

A I cannot give you a figure to quantify it, for one reason because any figure that you use could be matched against another specific figure, depending on the vintage that you take. But despite that, I would say that it certainly has increased.

BY MR. FUTTERMAN:

Q Has it increased at a rate greater than the increase in construction costs for conventional fossil-fuel plants?

A It has, in this sense, that since there is more construction involved in a nuclear plant of a given capacity than there is a fossil-fuel plant, any increase in, say construction wages, would tend to have a greater impact on nuclear plants than on fossil-fuel.

Q Dr. Netschert, is it a fact that approximately 85 per cent of the natural gas used for power generation in the United States occurs in areas west of the Mississippi River?

A That sounds like a reasonable figure, yes.

. . . .

[3]

EXCERPTS FROM DEPOSITION OF
ABRAHAM GERBER, TAKEN AUGUST 21, 1969

* * *
ABRAHAM GERBER,

called as a witness by the plaintiff herein, having been by me, the said Frances B. Spina as Notary Public aforesaid first duly sworn, was examined upon oral interrogatories and he did thereupon depose and testify as follows:

DIRECT EXAMINATION

BY MR. EISEN:

Q Will you state your name, please.

A Abraham Gerber.

Q And your business and home addresses, please.

A My business address is 80 Broad Street, New York City; and my home address is 9 Harbor View Road, Port Washington, New York.

Q Have you been hired by the defendants in this case to prepare testimony to be given at trial?

A Yes. I guess the word "hired" is all right.

Q Retained?

[4] A Retained. We have been retained to give testimony.

Q You are employed by what organization?

A National Economic Research Associates.

Q When you say "we have been retained," do you mean the organization, or yourself, or do you mean you and Dr. Netschert? Which of those, or all of them?

A Well, if anyone wants our services, they come to the firm, and we were the ones who were requested to work on this particular matter, Dr. Netschert and myself.

MR. HEDLUND: If it helps, Mr. Eisen, the checks are made out to NERA.

MR. EISEN: Well, I really wasn't getting into that detail.

BY MR. EISEN:

Q What is your position with NERA?

A I am a senior consultant.

Q How large a staff does NERA have?

A Let's see. At this point there must be about sixty people, with about forty in New York, twenty in Washington, and I think there are two people in Philadelphia. It is somewhere around [5] those numbers.

Q What is a senior consultant, or what have you done while you have been a senior consultant with NERA?

A I have done a great many things: consulted with a number of utilities, done some work for a coal industry organization, worked on rate matters; and testified in several matters, one before a Federal Power Commission hearing, a Pennsylvania State hearing, and in the Philadelphia Federal District Court.

Q Do you have a list of these things you have just cited, so that we could maybe save some time?

A Well, it is not very extensive. I have only testified in three cases. I am a neophyte.

Q I mean, do you have a list of the tasks that you have carried out in behalf of NERA? You don't have a prepared one?

A No. I can tell you the three cases that I testified in, but I have never tried to make a list of the things that I have done.

Q Well, what are the three cases, sir?

A Federal Power Commission case involv- [6] ing Mississippi Power Company, in which I testified in behalf of Mississippi Power; I testified in a rate case in behalf of Philadelphia Electric Company, before the Pennsylvania State Public Service Commission; and I testified in behalf of United Nuclear, in the Philadelphia Federal District Court, in their case against Combustion Engineering.

Q What kind of a case was that?

A Antitrust. United Nuclear was seeking an injunction to prevent Combustion Engineering from exercising its rights of ownership of 23 per cent of the stock, ac-

tually seeking to get a court order to compel Combustion Engineering to divest itself of the stock.

Q Was it what is known as a Section 7 case, do you know?

A It was a Section 7 case, yes.

The Court gave a favorable decision to United Nuclear.

Q When was that case?

A I think I testified last October, and the Judge handed down his decision in—I guess it was late June, maybe May. I don't really recall [7] the exact date, but it was in the last few months.

* * *

[9] BY MR. EISEN:

Q Anyone who operates a facility as a utility in the Midwest states of—I will extend that to Missouri, Minnesota, Wisconsin and Indiana.

A Well, I am doing some work right now for American Electric Power Company. They operate in Indiana and Ohio.

Q Are you presently doing this work for American Electric Power?

A Yes.

Q Does that involve a facility in Indiana?

A No.

Q What facility does it involve?

A It is in connection with an SEC hearing on an acquisition.

Q Not a Midwest area acquisition?

A Well, we think of it in the Midwest. It is Ohio. It is the acquisition by AEP of Columbus & Southern Ohio Electric Company.

Q What have you done in connection with this litigation to prepare for your testimony?

A Unfortunately, I just got back from three weeks away from the office, I guess it was midnight [10] two nights ago, so in the last three and a half weeks I have done nothing, or virtually nothing.

* * *

[19] But unusual, no. I think it wouldn't be hard to find a number of plants that would be getting coal from four or five mines.

BY MR. EISEN:

Q Would it be unusual for a generating station in the Midwest area—Illinois, Indiana, Kentucky, Minnesota and Wisconsin—to be receiving coal from more than ten mines?

MR. HEDLUND: May I have that question back, please.

Q (Read by the Reporter.)

MR. HEDLUND: By that, Mr. Eisen, do you mean to confine the Midwest under those five states for the purpose of this question?

MR. EISEN: Well, I could add the states of Missouri—

BY MR. EISEN:

Q States as you have used them, and as Dr. Netschert used them in his report.

A I would be very surprised to find a plant getting coal from ten mines. There may be some. I haven't looked at every plant in the area, [20] but I would be surprised to find any getting coal from that many mines. It makes a terribly difficult administrative problem. For one thing, trying to test coal coming into the plant from ten mines would just be an awful job.

Q Would it be your opinion that they could not design a boiler to take coals from ten different mines in that area?

A Ten different mines may all have similar coal.

Q That is right.

A That is not the reason it would be unusual, primarily.

Quite apart from the possible differences in coal characteristics that might occur, the administration of ten contracts is difficult. Ten different mines would make it very difficult to take advantage of the economies of scale in transportation.

When coal comes into a power plant it gets checked for its characteristics, its Btu content, it has to be weighed. Trying to do this with coal coming in from ten different mines could create a hornet's nest in just keeping track of [21] whose coal is or is not meeting the specifications. You would get into all kinds of arguments about which coal is creating problems.

If you get difficulties with the boiler for example, and this happens very frequently, a boiler gets clogged up, the fusion temperature isn't correct. If you are getting coal from ten different mines, you would have a difficult problem trying to isolate whose coal is causing the problem so that you know to get rid of that coal or make some changes.

Getting ten suppliers for a single plant creates very difficult problems, because certainly you wouldn't want to isolate the coal piles, your storage, from ten different suppliers. It would be too expensive to maintain ten different storage piles, so it all gets mixed together and it creates problems.

Q Yes. Even when you are buying from one supplier or from one mine, you sometimes have problems—not problems, but even that one mine will have and can have different coals of different characteristics.

A It could, but at least at that point you [22] know who to go to.

Q Isn't it a fact that utilities frequently blend different coals from different sources?

A Well, you have got a lot of words characterizing it. I don't know about "frequently." But yes, utilities at a particular plant may be getting coal from two different mines or even three different mines, or four.

Q And blending it?

A Yes. They blend it.

Q And do they not also sometimes get coals from different mines and maintain separate piles?

A I don't know of any particular case, but I can think of one plant that I know of where they keep a separate coal pile for one unit of the four, because there was a series of three units built fairly similar, and then a fourth unit was built, almost as a separate plant,

with supercritical temperatures and pressures, and they had a special different kind of boiler, and there they have a separate coal pile for that one unit, but that unit is larger than the other three put together, so it is the equivalent of the whole plant.

Q Could you—

[23] A That is, you would put aside a separate coal pile for a large unit which requires a lot of coal, but if you had a small plant and had a coal pile of, oh, say 200,000 tons, it would look kind of silly, and it would be kind of silly, to have five, six, seven, eight different coal piles, one for each unit, or one for each supplier.

Q So that in general, the coals are commingled as they come in, or at least there is no effort made to keep separate piles for different generating plants?

A Oh, they definitely have separate piles for different generating plants.

Q I don't mean that. I mean, as the coal comes in, it is not segregated by source for a particular plant; it is blended together, is it not?

A I would say generally that is the case.

Q One of the references that you referred to is "Blauvelt, H. W., 'The Future of Coal as a Major Source of Energy.'"

A Yes.

Q Who is this individual?

A Blauvelt is Executive Vice-President of [24] Continental Oil.

.

[25] Q It is not your testimony, I take it, that [26] the coal industry is presently in difficulty finding markets for its coal.

MR. HEDLUND: May I have the question back, please.

Q (Read by the Reporter.)

BY THE WITNESS:

A If by that you mean the coal industry is not having difficulty disposing of its present level of production, no, it is not. Most of it is committed under long-term contract.

If you mean they are having difficulty or can expect to have difficulty expanding that production continuously and significantly year by year, yes, I think they are going to have difficulty.

The fact that Commonwealth Edison is already on line or under construction with enough nuclear capacity to account for somewhere, as I recall, between a third and forty per cent of its total capacity by the mid-1970's, is very sobering for the coal industry.

BY MR. EISEN:

Q Do you know whether or not Commonwealth Edison has any new coal plants on line?

A Oh, sure. They are building one now because there was a capacity problem and they couldn't count on delivery of the nuclear capacity on time, so they decided to build a coal-fired plant, but that doesn't mean they won't continue to build nuclear plants.

Q Couldn't you make that generalization about nuclear plants, that they are not ready on schedule?

MR. HEDLUND: Pardon me. May I have that question back?

Q (Read by the Reporter.)

BY THE WITNESS:

A No. I can make the generalization that those that have been delivered to date, which is, I think somewhere around two and a half million kilowatts of capacity out of the seventy-five million, roughly, on order, haven't been delivered on time, but I really can't generalize about what is going to happen to the other seventy-odd million kilowatts that are being ordered or constructed.

* * * *

[41] Q When do you expect, or do you expect, that the coal industry will die?

A I can give you a better guess about the average life span of, say, a group of people in this room, but I wouldn't venture a guess on the death of the coal industry. I don't know if it will ever die. Things happen, things change. You have to be very brash to forecast what will happen ten years from now, let alone fifty years or a hundred years from now. It is possible all kinds of things can happen.

Q Isn't it a fact that the known coal reserves are the only energy-fuel reserves in this country which we know extend beyond several decades?

A Well, facts are peculiar things. I wouldn't accept that as a fact. It is almost meaningless to talk about coal reserves extending beyond several decades.

Are you talking about coal reserves that are a thousand feet below ground and eighteen inches thick?

Q Well, yes.

A They are coal, but for all intents and purposes they are not very useful now. It would [42] raise the cost of fuel so much that it would change the whole—

* * *

BY MR. EISEN:

[52] Q Well, what is your view of that, his statement, his title, or whatever you want to call it, or my statement, that over half U.S. generation will burn coal through 1980?

A I used to make these forecasts pretty regularly, Mr. Eisen, but I haven't looked at it to try to revise it, in light of more current information, in about three or four years.

I would say that coal probably will account for, if I had to make a forecast, roughly half the generation by 1980.

[53] But this could change. This is a fluid thing. It could change.

Q Either way?

A Either way, but I would say it is more likely to change to a lower figure than a higher figure. It is the kind of thing that can change.

Q Would one of the factors affecting that changeability be control of air pollution, discovery of practicable air pollution controls?

A Oh, there are many things that can affect it.

I wish I could do as nice a job as I saw done by a Government power official, giving the heads of coal companies a lesson in load factor.

You see, if they start putting in nuclear plants, well, at the present rate or at a more accelerated rate, these nuclear plants get loaded very heavily, and you can make a very drastic difference in the coal burn by unloading the existing coal-fired plants.

You see, even the existing plants are not a certain market for the coal industry, because by shifting the generation to the nuclear plants, you reduce the generation and thereby the coal burn of [54] the existing plants, and you can make some very drastic changes that way.

Q My question was, would one of the factors that would be considered, be the control of air pollution? Is that one of the factors?

A That is one factor.

Q And wouldn't another factor be the ability to gasify coal reserves, coal deposits.

A I don't understand what that has to do with it.

Q Well, I am asking you whether it is one of the factors which will affect your prediction, or anyone's prediction, of the extent to which coal will be utilized for a generation of electricity.

A Not at all.

Q Gasification has no bearing on this?

A I don't see how that would affect the use of coal for generation.

Do you mean go through the gasification step and then use the gas to generate electricity ?

Q Yes.

A I don't see how that has any bearing at all.

[60] Q In this article the authors refer to the generator as being designed to utilize bituminous coal with a range of analysis of ash as 10 to 20 per cent, moisture 3 to 15 per cent, fixed carbon 35 to 55 percent, sulfur 1 to 6 per cent, BTU's 10,000 to 13,500, and grindability as 45 to 70, hardgrove.

[61] What does "hardgrove" mean? Do you know?

A It is a scale of measurement for the amount of effort required to grind the coal. It is the hardness, really.

Q These specifications, are they ordinary or usual for a modern boiler, are they unusual, or would you care to comment on them in that respect?

A I can only say that they are the specifications stated by them for that particular unit, and I wouldn't characterize it beyond that.

Q Would you say that a boiler designed to use coal with a Btu value of 10,000 to 13,500 would be common, or uncommon?

A That is a fairly wide range, but you see, that plant is being—

Building a power plant involves a lot of complex factors. That plant is being built to use the coals from that particular area. That is a depressed area; it is an area served by the Kentucky Power Company, which would be the owner of that plant; and for a lot of reasons the company serving the area tries as hard as possible to use the coal from that area in the power plant serving the area.

[62] Q Do you know of any utilities in the State of Illinois or the State of Wisconsin which could not use coals conforming to these specifications, as I have previously stated in my prior question?

A Prior to building a power plant, you can use any coals.

Q Present existing generating facilities.

A I haven't looked at the specifications of coal in any particular plants in the Midwest.

I would assume that there are probably some who can't, and some who can, but I have no way of knowing exactly on any one plant.

Q The boiler design, then, can account for wide variations in the specifications of the coal to be used?

A No. You have got that backwards.

You find out what kind of coal you are going to use, and then you design the boiler to use it.

Q Well, whichever way you want to put it, frontwards or backwards, it is a function of boiler design, is it not, to determine whether—

A No, no. Boiler design is a function of [63] the coal, and it does matter which way you state it.

Q The next reference is to "Griffin, E. M., and Profita, G. D., 'Design and Construction of the Steam Generator and Related Equipment.'"

Who are Griffin and Profita?

A I really don't know Griffin, but Profita is a mechanical engineer with the American Electric Power Service Corporation.

Incidentally, I think if you look into the reference itself, it tells you who these people are. Griffin may be with the manufacturer.

Q Well, I was going to ask you whether you knew them and considered them reliable.

A Oh, I know Profita. He was involved in the design of the steam generator and related equipment.

Griffin, I don't know. I would have to look at the article to refresh my memory. I think he is with the manufacturer, but I am not sure.

Q I would take it that you would, in a general way, since you have used these references, vouch for the reliability and trustworthiness of the persons or organizations responsible for the documentations.

[64] Well, I can't vouch for what anybody else says.

* * *

[88] Q Do you know Harry Perry?

[89] A Yes, I do.

Q Is he with the Department of the Interior presently, do you know?

A The last I heard, he was still with them.

Q What is his reputation for knowledge and reliability in the field of coal research?

A I think it is very good. I think highly of him, personally.

Q Do you know Joseph DeCarlo?

A No. That is just a name I always see on various Bureau of Mines reports. I think it appears on that Weekly Report.

Q How about J. H. Field, Project Coordinator, Process Engineering Group, U. S. Bureau of Mines?

A No. I don't think I know him.

Q In your report you refer to long-term contracts for coal supplies, entered into by electric utilities. Could you tell us the reasons why these long-term contracts, as you state, have been entered into?

A Well, I think I stated the reasons in the report, but to repeat it:

From the utility's point of view, they want to assure the economical supply of fuel or [90] the supply of fuel

as they have provided for it and anticipate getting that fuel for the life of the plant or for a substantial portion thereof. They want to assure the quality and the price.

A power plant is a very major investment, and it is all worth nothing if the fuel isn't there.

From the coal supplier's point of view, a coal supplier is very unlikely to make the investment to open a mine unless there is assurance of a market for a very substantial share of the capacity for a reasonable period of time; that is, a period of time long enough to amortize most of the investment.

So from the point of view of both parties, it is advantageous.

Furthermore, transportation arrangements that take advantage of economies of scale, such as unit trains, very often involve the ownership by either the utility or the coal company of the cars. This is another major investment, and this, too, has to be assured, guaranteed, for a reasonable period of time.

So for many reasons it is important to [91] have a long-term contract.

If you had a sulfur problem, for example, and you went out and got a low sulfur coal, you would want to assure that you had that supply and not find yourself, a year later, searching elsewhere for low sulfur coal.

MR. HEDLUND: May I interrupt here, and go off the record.

(There was a discussion off the record, after which the taking of the deposition was resumed as follows:)

BY MR. EISEN:

Q Do you know how coal companies acquire reserves?

A They acquire them in many ways.

Q Do you know how they acquire them? I mean, do you have any knowledge or experience on—

A Yes.

Q How do they go about acquiring reserves?

A One way of doing it is to buy land, another way of doing it is to lease land, another way it to get mineral rights with royalty payments. Those are essentially the ways of getting them.

.

[104] Q Do you know the cost factors which must be considered in undertaking underground mining?

A In general.

Q Could you tell us some of those cost factors, the principal ones?

A The cost of digging a hole; there is a cost of ventilating, and it is a rather high cost. Then there is a cost of all the equipment, the digging equipment, the cutting equipment, the haulage equipment. That is about it; to drill a shaft, provide access, and so on.

Q What are the principal cost factors in undertaking strip-mining operations?

MR. HEDLUND: Such being the capital cost?

MR. EISEN: Yes.

BY THE WITNESS:

A The cost of very large shovels, trucks, and the cutting equipment.

BY MR. EISEN:

Q Could you compare the cost factors of underground versus strip mining, both as to capital costs and operating costs?

A The cost of developing a mine will vary, depending on conditions. As a rule of thumb in the [105] industry, they usually refer to a figure ranging between six and ten dollars a ton to open a mine, with the deep mine usually being toward the lower end and the strip mine toward the higher end, but it is likely to range somewhere in that area.

Q Have you ever had occasion to encounter a situation where there was a question as to whether to strip-mine a particular field or to underground-mine a field?

A I, personally?

Q Well, a situation that you were associated with, where you had knowledge.

A No.

Q During the time that you were associated with American Electric Power, did they ever run into a situation where they had to decide whether to go underground or put in a strip mine?

A No. As far as I can recall, it was always clearly in mind whether they do one or the other.

Q American Electric Power, as I recall, have what is considered a fairly deep strip mine, do they not, in Ohio?

A They are developing a strip mine. They have stripped a field, and there is now another [106] seam lower down which they are going to strip. I guess they have actually started stripping.

* * *

[110] BY THE WITNESS:

A I don't understand what you mean by that. Do you mean somebody else, other than a utility, generate electricity with coal?

BY MR. EISEN:

Q Well, I said power generation.

Will there be a demand for coal, other than for utility purposes?

A Oh. A general demand for coal for purposes other than electric power generation?

Q Well, I don't want to eliminate power generation on a smaller scale than used by utilities. That is the only reason I didn't use that delineation.

A It is my view that this will continue to be a relatively small market, with virtually no growth and possibly some decline.

Q Is there presently research and development by coal companies and others in efforts to find uses for coal other than for power generation by utilities?

A There are efforts to gasify coal, liquefy [111] coal. I wasn't talking about that when I talked about the decline in this non-utility market. But whether this market will develop is still an open question. In any event, I would think it is a good distance away.

* * *

[121] In covering these costs per Btu's, if indeed the cost of oil per Btu in Illinois is 60 cents per million and the cost of natural gas is 35 and 40 cents, and the cost of coal is about 25 cents, would you say that those three fuels in Illinois, so far as use for utility purposes, would be competitive?

A Yes, I would.

Q What is your basis for that statement?

A Well, in the first place, you can't simply look at the price of the fuel. You also have to look at the cost of burning the fuel. So inherently, gas can cost something more than coal and still be more economic fuel; so can oil.

And then there are varying situations: It may be that any particular utility can find that by locating a power plant on Lake Michigan they can get a lower cost delivery of oil.

They are competitive in this sense, also: Utilities are putting in a lot of peaking capacity. They need capacity that can come on the line very quickly for short periods of time. A coal-fired plant is not the kind of plant you would build for that purpose, for a number of reasons, so they [122] are putting in gas-fired turbines. Now, these gas-fired turbines are making it possible for utilities not only to meet peak loads or emergencies, but also making it possible for them to shut down a lot of the older coal-fired plants that would otherwise contribute to the pollution problem, for example.

Commonwealth Edison—I forget the figure, but Commonwealth Edison is putting in a very, very substantial amount of this kind of gas turbine capacity. I think it is something over half a million kilowatts, and it is shutting down old coal-fired units. The gas is directly displacing coal, so they are competitive.

Q Other than that one example of the Commonwealth Edison installation, do you know of any others in the Midwest area, Illinois, Indiana, West Kentucky and Minnesota?

A Well, AEP is putting in an emergency unit that can travel on a truck, in the event of an emergency or for peaking. Specifically, at the moment, I would hesitate to name any others specifically, but I would be very surprised if there is any utility, of any size in [123] the area, that isn't putting in some amount of this kind of capacity.

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[141] REDIRECT EXAMINATION

BY MR. EISEN:

Q I want to ask the witness: When you use the term "reserves," what do you mean by that term, "coal reserves"?

A That is what I am talking about.

Q In the same way it was used in the document to which you just referred?

MR. HEDLUND: Well, Mr. Eisen, I might point out that it is used in a variety of senses in the report itself.

MR. EISEN: Well, I was just trying to draw on the witness' knowledge and experience.

BY MR. EISEN:

Q When you hear the term "coal reserves," what do you understand that to mean?

A I try to find out what whoever is using the term means by it.

For example, I know the 800-some-odd billion tons of coal reserves, that is often referred to, generally means a total resource. But this doesn't mean anything if you are talking about what is economically recovered at present prices or what tonnage you can recover if you permitted a 25 [142] per cent increase in cost or a 50 per cent increase in cost.

As a matter of fact, Dr. Netschert, some years ago, in a book on oil reserves, I think was one of the first to draw this distinction between ultimate resources and reserves; ultimate resources being the total of everything that you have in the ground that you might find, and reserves being defined in terms of a specific price; that is, the coal or the oil that you can recover at X dollars per ton or per barrel or an additional amount.

They do the same thing with uranium now. They talk about the reserves available at \$7 a pound, the reserves that would be available at a price of \$10 a pound, or the reserves that would be available at a price of \$20 a pound. This is a much more meaningful kind of reserve figure.

MR. EISEN: We have no further questions.

MR. HEDLUND: We have nothing further.

We will not waive signature, but an any—Notary stipulation is acceptable to us.

MR. EISEN: Yes. That is acceptable.

AND FURTHER DEPONENT SAITH NOT.

* * * *

[3]

EXCERPTS FROM DEPOSITION OF
PETER O. STEINER, TAKEN OCTOBER 7, 1969

* * * *

PETER O. STEINER,

called as a witness by the plaintiff herein, having been by me, the said Frances B. Spina as Notary Public aforesaid first duly sworn, was examined upon oral interrogatories and he did therefore depose and testify as follows:

DIRECT EXAMINATION

BY MR. CUSACK:

Q Please state your full name.

A Peter O. Steiner.

Q And what is your home address?

A 2611 Hawthorne Road, Ann Arbor, Michigan.

Q By whom are you presently employed?

A University of Michigan.

Q What school?

A I have a joint appointment in the School of Law and the College of Literature, Science and the Arts.

Q And what are you teaching in the School of Law?

A This semester I am teaching, with another member of the staff, a course in Federal Antitrust [4] Law.

Q Is that Professor Kauper?

A No. Professor Kauper is on leave. Professor Donahue is the other member of the staff.

Q What are your duties in this antitrust course?

A I am, with Professor Donahue, teaching the course.

Q What do you highlight—the economic aspects of antitrust; do you go over the cases?

A We are teaching the course jointly. My competence is as an economist, my training is an economist. His is as a lawyer. Obviously, I spend more time on the economic aspects.

Q What is the methodology? Do you have the case method in this course?

A Yes, we do.

Q And do you examine the cases both in the legal aspects and the economic aspects?

A Yes.

Q And is it your duty to comment on the economic aspects of the various cases?

A It is my privilege.

Q And do you?

[5] A I do. I try to.

Q Profesor, where did you go to college?

A I was an undergraduate at Oberlin College.

Q What was your major?

A Economics.

Q Did you graduate from Oberlin?

A Yes, I did.

Q And where did you do your graduate work?

A Harvard University.

Q When did you graduate from Harvard?

A I got a Master's Degree in 1949, and a Ph.D. in 1950.

Q Was the Master's in Economics?

A Yes, it was.

Q And the Ph.D. in Economics?

A Yes.

Q What was your thesis at Harvard?

A It was called "Workable Competition in the Radio Broadcasting Industry."

Q Other than your education at Oberlin and at Harvard, did you attend any other universities as a student, either graduate or undergraduate?

A No, I did not.

Q And you were a Teaching Fellow at Harvard [6] while you were getting your Doctorate?

A That is correct.

Q What did you teach at Harvard?

A I taught in the Elementary Accounting and the Elementary Statistics courses.

Q Would that be in the Business School?

A No.

Q In the Economics School?

A In the College.

Q You are also teaching at the present time, are you not, in the Arts College in Michigan?

A That is correct.

Q Literature, Science, and the Arts College?

A That is correct.

Q And what course are you teaching now?

A I am not teaching any course this semester. I am teaching two courses next term.

Q And what courses will those be?

A One will be a graduate course in economic theory, the other will be a sophomore course in economic statistics.

Q In what year did you get your Ph.D. from Harvard, again?

A 1950.

[7] Q And following the award of your Ph.D. from Harvard, what did you do?

A In 1949, I went to the University of California, and began teaching there.

Q At Berkeley?

A That is right.

Q And what did you teach at Berkeley?

A Well, I was there for seven years, and I taught a great variety of things, mostly economic theory, some industrial organization, some statistics.

Q Other than what generally could be referred to as economic courses, did you teach any other courses at Berkeley?

A No, I did not.

Q And you were at Berkeley from 1949 to what—1956?

A I was officially there from 1949 to 1957. I was in residence to 1956. The year 1956-1957, I was on leave at Harvard. I was still nominally on the Berkeley staff, but I did not return there.

Q What did you do at Harvard?

A I was there on a Social Science Research Council Fellowship, doing research and attending an occasional seminar.

[8] Q What did you do research on?

A That year I was working chiefly on two problems. One was peak-load pricing, and the other was—well, really it was concerned with water resources, but it was really a problem in the analysis of public expenditures and public expenditures criteria in water resources.

Q What does peak-load pricing refer to, sir?

A It refers to the fact that some industries, electric utilities, for example, may have different levels of demand for their capacity at different times of the day or different seasons of the year, and the problem is to determine what is the appropriate capacity they should have in this sort of a circumstance and the appropriate utilization of that optimal amount of capacity when you determine it. Frequently this is accomplished by variations in prices, by having lower prices for off-peak users. As you know, it is the kind of problem that comes up with respect to gas, with steady and interruptible gas; it comes up in lots of uses.

My particular concern was with the effect of the pricing scheme on the amount of capacity that was created.

[9] Q And you were at Harvard for years, then, doing this work?

A I was there the academic year 1956-1957.

Q And what did you do after that?

A I joined the faculty of the University of Wisconsin in Madison.

Q Did you join as an Assistant Professor?

A No.

Q As a full Professor?

A No.

Q As an Associate Professor?

A That is right.

Q And what did you do at Wisconsin? What did you teach there?

A I was in the Department of Economics, and I taught a variety of courses in Economics for the next eleven years.

Q Both in the undergraduate and the graduate school?

A That is correct.

Q And when did you leave Wisconsin?

A I joined the faculty at Michigan in 1958, July 1, 1958.

Q Do you mean 1968?

[10] A Thank you. I mean 1968.

Q Other than the academic career which you have just outlined, what full-time jobs have you had since graduation from college?

A I spent something over three years in the Navy during World War II.

Q Other than that, sir.

A None seriously. I spent, I think, the first three or four months after I graduated from college as an employee of Macy's in New York.

Q A summer job, in other words.

A It wasn't a summer job, but it was a job between college and being called up to active duty.

Q I see. Would that be all?

A I believe so, yes.

Q You have told us the title of your thesis, Professor. Did you write anything that was published in college or in graduate school other than your thesis?

A No.

Q Since the publication or the writing of your thesis, what have you written?

A I have written a fair number of things. I would be glad to give you a list, if you like. [11] I would be glad to mention some of the—

Q Would you give us the highlights, and would you also supply us with a list?

A I would be glad to do that.

I have written, well, three major books; one was called "The Economic Status of the Aged," second is a text book with Richard Lipsey, called "Economics," which was in two editions, and the third is "An Introduction to the Analysis of Time Series."

I have also contributed chapters to half a dozen other books, and I have written, I suppose thirty or forty articles and thirty or forty book reviews.

I think it is easier to give you a list than to read the list into the record.

Q May I see the list, please, sir.

A Yes. I may even have a more up-to-date one than that.

Q If you have a more up-to-date one, we would appreciate having it.

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[19] BY MR. CUSACK:

Q Professor Steiner, I hand you what has been marked as Steiner Deposition Exhibit 1 for identification, and I ask you, sir, to identify [20] this, please.

A I identify it in the sense that it is what it purports to be.

Q And what is that, sir?

A It is a statement by me basic biographical and bibliographical facts about me.

Q And starting on page 1, at the bottom, you have a list of publications which goes to page 5, is that correct, sir?

A That is correct.

Q And as of August, 1969, which is the date of this document, are these all the publications which you have written?

A I have not listed in here book reviews and some minor things. These are all the substantial publications that I have had during that period.

Q Thank you.

I believe, Professor, we were discussing your role as a consultant to the Bureau of the Budget in regard to budgeting.

A Yes.

Q This was, I believe, in 1959 and 1960?

A No. It turns out that the report here, which [21] appears on page 5, called "The Classification of Budget Data"—

Q That is page 5 of Steiner Deposition Exhibit 1?

A That is correct.

At that time the Budget Bureau was considering whether it should shift to a system which is sometimes called "capital budgeting" in one of a number of reforms, and I looked into their budget procedures and prepared this document.

It was published in 1962. I believe I spent about a year working on it, so it would have been 1961-1962.

More or less concurrently with that, I was a consultant to the Department of Treasury, consulting in the Office

of Tax Analysis, on the subject of oil depletion. At that time, even as now, there was a tax reform bill being discussed.

I had, as I mentioned earlier, done some work on oil and oil depletion, partly as a result of the consulting I had done for Pan American Petroleum, but partly in terms of some articles I had written which also appear here (indicating), and I was consulting for the Treasury.

[22] Q Excuse me.

This work for the Department of the Treasury, when was this, sir?

A I am not exactly sure. It was the time when the Kennedy administration presented to Congress ultimately the tax cut bill. At the time this was going on, if you recall, there was discussion of a tax reform bill as well. At the last moment the political judgment was made to defer reform and to fight for the tax cut.

That, I think, was sometime in 1962-1963, to my recollection, but the dates on that can be readily checked.

Q To whom did you report at the Department of the Treasury on this matter?

A The Office of Tax Analysis, I think was under the direction of Stanley Surrey who was an Undersecretary of Treasury. His chief Economic Assistant was Harvey Brazier, and I worked directly as a consultant for Brazier and with Surrey. The two of them were the people to whom I reported. I did a number of memoranda for them, and so on.

Q Did you reach some conclusions in regard to the oil depletion allowance?

A I think that I participated in, with the lawyers and other economists involved, coming up with a series of proposals for tax reform in this area.

Q Very generally, what were your proposals?

A That the size of the subsidy involved in the depletion allowances could be reduced for the same benefit if we undertook a number of changes, including the redefinitions of properties, changes of rules with respect to consolidation, changes in the treatment of certain classes of royalty recipients, and that perhaps we could accomplish the objectives of reform in a politically more satisfactory way than by a direct attack on the rate of depletion.

. . . .

[23] That tax reform proposal did not involve a cut in the rates, although it proposed change, I believe, in the net income limitation and in definitions of properties, the consolidation rules, and so on.

It is a document that I suppose still exists somewhere. I think largely due to the influence of the then Vice-President, Mr. Johnson, [24] this was put to one side and other things took precedence.

Q We understand.

What other consulting work have you done, sir? We can take it in order or approximately the same time.

A I think about that same time I became a consultant for Mayer, Friedlich in Chicago in conjunction with their bank merger case, a merger of Continental Illinois and Security National Bank.

Q Do you mean City National Bank?

A I am sorry. The City National Bank. Thank you.

Q And you were retained by Mayer, Friedlich as a consultant?

A That is right.

Q At this time you were at Wisconsin, I understand.

A Yes. I was at Wisconsin, and I do not remember, but again that could easily be checked, precisely when that was.

That turned out to be a major venture on their part, and on mine, until, as you know, that case was ultimately mooted by the new bank merger [25] legislation which effectively exempted that merger from attack.

[143] Q Well, then based on that assumption and stipulation, would you agree with the statements that he makes in the paragraph which I have just read?

And please take your time, if you so desire.

[144] A He says that growth by merger. That is, I take it, what he means by—

Q External growth?

A External growth.

He is measuring here the concentration, I take it, as measured by the eight largest Midwestern producers. He is taking the growth of their production, and he is measuring that increase in production in terms of the production from acquired properties. Within those definitions,

I have no serious doubt but that his computations are correct, although I have not in fact checked them.

Q Going on, sir, to some additional statements made in your report, you state that:

"The period of rapid change and basic challenge to individual coal producers, and coal mining as a whole, has not ended."

I assume this is still your view, sir?

A That is correct.

Q And on what do you base that opinion?

A I think that sentence must be read in the context or as an introduction to the two following sentences, each of which I think bears [145] upon it. One of these concerns the utilization of nuclear energy, which is playing an increasing role; the second is the challenge that air pollution and air pollution regulations will place upon coal producers.

With respect to nuclear energy, I think one doesn't need to look very much further than, I believe it is Dr. Netschert's Table IX, to see that nuclear energy, which, as of 1968 appears to account for approximately one per cent of capacity, appears to account for approximately 39 per cent of the planned additions to capacity.

From what I see from what is in the record at a number of places, it is very clear that nuclear energy is playing a role, and its role, if I were a coal producer or if I were the coal industry, I would regard as a source of competition that is beginning to play a role that has not played a role in past statistics in terms of in-place and operating capacity.

I think with respect to the anti-pollution effect, which represent, if I read the record correctly, a more serious threat to coal producers and to producers of other competitive fuels, that [146] the increasing concern with this problem, and the increasing application of existing ordinances and the probable introduction of new ordinances, are bound to challenge the coal industry either to effectively find low-sulfur fuels, which would be expensive, or to desulfurize the fuel, which I think the SEDRA report persuaded me was not either a quick or a cheap matter.

Q Which report was that, sir?

A The SEDRA, Seversky Environmental Dynamics Research Associates.

It was my impression, from both of those sources, that the coal industry period of competitive struggle was not over, that both of those things, the challenge of other fuels and the challenge of meeting the pollution requirements, meant it would be under continuing pressure to find ways of reducing its cost if it were to effectively compete twenty and thirty years hence, which is the period, I take it, one is talking about when one talks about the foreseeable future.

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[182] Q Professor, as the public utilities have entered into long-term contracts for the supply of coal, do you know whether they have reached further away geographically to fulfill these contracts?

A I think it is my general impression that the unit train has extended the reach, and that the long-term contract has, in some cases, led to greater distances for supplies and otherwise. But I do not have a very strong factual basis as to whether, on average, the distance of a ton of coal that is shipped has increased, and if so, by a significant amount.

It is my impression that these various things have increased the potential range of the coal companies, just as increasing utilization of the coal near them pushes them out. Indeed, part of the incentive, if you like, for some of these long-term contracts and economies may have come about because of the need to ship coal longer distances if coal is to be used.

MR. CUSACK: I would like to have a minute to consult with my colleagues.

.

[185] Q And I take it that that is your view, that there are a sufficient number.

A That is correct. As I try and go on, then not only because of their number but because of the nature of the buyers with whom they deal, and their bargaining power and the availability of alternative sources of

supply, my conclusion, as we come to in Paragraph 12, is that the situation is basically competitive and that the goals of low prices, pressure on costs, pressure to improve in response to demand, still exist.

Q At what point, Professor, would you consider the concentration in the coal industry in the Midwest to be anti-competitive? At what level of concentration?

For example, why don't we glance at the schedule entitled "Production of Coal in Illinois by the Leading Companies and their Subsidiaries for the 1967 Calendar Year," or, if you will—

THE WITNESS: Well, could you help me find that?

* * * *

[187] Let's first suppose that the relevant measure of market share is production. That is something, as you know in my memorandum I suggest it seems to me that in coal where the business is future contracts may not be correct, that maybe we should be looking at uncommitted reserves or total reserves or—

But let us, for the sake of the discussion of this point, take production as the relevant measure, that is, take the figures in the Table. I can readily conceive of circumstances in which, if the four-firm concentration were as high as it is there, or the eight-firm concentration, you would begin to say you were either at or near the point where you worry about market share. If, for example, there were no other sources of supply, if there were relatively weak buyers—I don't think I want to go into now that situation.

* * * *

[191] It is the essential question, obviously, of anti-merger policy, when it is applied to specific factual situations.

Q Well, Professor, would you be alarmed if one company had 50 per cent of the Midwest production of coal?

A There are many things in this. I said to you that I am not necessarily persuaded that production is the relevant statistic.

If it turned out that one company had 50 per cent of this year's production, had no reserves, had all of its existing reserves—no reserves other than those committed

on long-term contracts, I would think that company would not be an important factor in future competition. Moreover, so far as it had acquired that market, it was already spent on these long-term contracts.

Q Professor, assume—

MR. HEDLUND: Have you finished your answer, Dr. Steiner?

THE WITNESS: I am not sure.

MR. HEDLUND: I did not mean to imply that you hadn't. Mr. Cusack jumped in.

* * * *

[192] When one talks about the coal industry, at what stage the concentration, whether in the hands of a single firm or the group of leading firms, has the effect of substantially reducing [193] competition is one that has to be determined, and it is much easier to determine that in the actual factual situation than it is in the hypothetical situation; that is, in this situation we can look: Given this degree of market concentration, has there been a tendency for the price of energy to rise, and the answer to that appears to be no; therefore, we seem to conclude at this level that this increase in concentration, this shift of the utility market so that it is very heavily involved in a relatively small number of companies, appears not to have exhibited any of the signs of anti-competitive performance and behavior that are those indications.

Now you are asking me to take a quantum jump from there to a situation that is different.

If you said, "Suppose all the coal in the United States were under the control of a single company, would you be alarmed?" And I would say, "Of course I would be alarmed." I can see all sorts of people who would have their alternatives highly limited, and who might indeed be exploited by that, and it is perfectly clear—that extreme is easy.

[194] BY MR. CUSACK:

Q Well, Professor, assume that you had one coal producer in the Midwest. Wouldn't your consumers be able to turn to oil, gas and nuclear as an alternative source of supply?

A In the long run, of course they could.

Q Then would this extent of concentration bother you?

A Yes, of course it would, because there is the existing life of companies that are committed to coal; there is very likely the too-rapid phasing out of coal in the long run and shift to other things.

The competition in the coal industry benefits the use of resources. It is a societal gain, in terms of if it leads to coal being produced at something like its appropriate cost level, if it stimulates the search for better ways to mine and produce coal, it stimulates efficiencies in these ways.

Q Professor, how could a consumer be harmed, if there was merely one producer in the Midwest, if that consumer could get alternative sources of fuel?

A Because if that consumer, let's say is [195] committed in terms of its present boiler design for the next ten years to use coal, it is, in the first place, limited in what it can do for the next ten years, and it could be hurt. It is, in the second place, if it is building a new plant, faced with only one coal producer, and let's say one other producer, and its alternatives may indeed be more narrowly limited than they ought to be.

* * * *

[217] Q Assuming coal consumers in Illinois purchased on a regular basis, and—you gave the case of a housewife—let's take one coal consumer, and let's say this coal consumer purchased coal from, say [218] half of the mines in Illinois but not the other half. Would all of the mines be in the market area, or just half of the mines?

A It would depend whether all the mines were among the practicable alternative sources of supply.

Q This is the key thing, then, the practicable alternative sources of supply?

A That is a key thing, yes.

Q Is it the crucial thing?

A The crucial thing for what?

Q For determining the section of the country.

A I thought we were talking about a market.

Q No. I am talking about section of the country.

A If my recollection serves, that is the first time that phrase has been mentioned this morning.

Q All right. Market area, relevant market area.

A May I distinguish two situations, Mr. Cusack: one in which you have a customer, let's say a coal consumer, who purchases from half of the coal producers in the State of Illinois, and [219] in which it is quite easy to distinguish that half of the coal producers from the half from which it does not buy, in terms of such factors as quality of coal, distance, location, and so on, and in which you could thus say this first set consists of those from whom it could practicably buy, in the sense of the products being close substitutes, and this other set is substantially less practicable for it to buy from; as distinct from a situation in which that same customer buys from half of the coal producers, and you say this looks to be a choice of either random assignment or convenience or so on. I cannot see any significant difference between the half from which the customer buys and that from which the customer does not buy.

I would say that one's interpretation of that evidence as to which firms the customer buys from is quite different in the two cases. In the first case I would think there would possibly be a market division that included one set and excluded the other, and in the second set it might well be that there was no sensible distinction in the market alternatives available; it is just [220] that the customer had chosen to exercise options with certain of the sellers to whom he could have turned.

* * * *

[258] BY MR. CUSACK:

Q Would you please tell us specifically—you mentioned United Electric. Do you know of any other companies or any other mergers?

A I have not evaluated any other of the mergers.

Q On what, Professor, do you base your testimony in regard to the United Electric merger? On what evidence?

A On all of it.

Q Which evidence? Whose testimony?

A Well, let me talk about what I think the evidence is, and then we can come back and say where is it that I learned that particular piece of information from.

I am persuaded, on reading this record, that United was in a position where its current strip reserves were heavily committed; where its uncommitted reserves were small.

I am persuaded, reading the record, that [259] it was unable to obtain additional strip reserves of economically minable quality, and that without such reserves it was unable to enter into future long-term utility contracts of the kind it currently has, and that it has, in the past, entered into.

I am persuaded, by the record, that United Electric Companies did not have a deep-coal capability, in terms of its management and mining personnel, so that it could have effectively operated a deep mine in a complementary fashion to its remaining strip reserves so as to, from the two sources, provide coal on a contract.

Q Are you finished with your answer?

A I am thinking. That has been a long answer. It was a long question that you asked, and I am thinking as to where—

For those reasons, its inability to get the reserves necessary to enter these contracts, it seemed to me that it was necessary for United in some way to acquire sufficient coal so that it could enter in the future, and I am persuaded that merger with a deep-coal mining company was one of the alternatives open to it, and perhaps in view [260] of the general reserve situation and the shortage of trained mining personnel, the only way open to it.

Now, you also asked about the sources.

Q Yes. What are the sources, Professor?

A Some of that information, certainly the notion with respect to reserves, and to some extent the difference between deep-mining capability, I have from Mr. Weir and Mr. Organ. It was also discussed at some length in the depositions of Mr. Nugent, Mr. Morris, I believe, and Mr. Tarzy, and I have some from the report of Dr. Netschert. I am sure there are other places as well.

This kind of issue, it seems to me, is a central issue in the lawsuit, and therefore it has been discussed by both you and Mr. Hedlund with a dozen of the witnesses on deposition.

Q Did you read Mr. Organ's deposition?

A I didn't read his deposition; I read his letter. Indeed, I may have read his deposition. I don't remember. I did not read it at the time I wrote this report.

Since writing this, I have received the depositions of the several expert witnesses, and I [261] have read, I know, the Netschert and Gerber ones, and I think I have read the Organ deposition.

* * *

Q Is it your belief that it is, in many in- [262] stances, of identical quality?

A I don't know that, either.

I think that the coal quality is determined by the coal seam and its properties, and I am sure that some seams are strippable at some locations and are deep at other locations.

Q Professor, would you believe that it would be legal for United Electric to be acquired by Peabody?

A We are going back to the question of my deciding what is legal or illegal. It is not a posture that I enjoy, although when I am appointed to the Court I will be pleased to answer that kind of question. I hope the record will show that I was being facetious in that reply.

A I don't know. I have not looked at that acquisition, as to whether in fact the facilities of Peabody and of United—exactly where they are located.

I think it is my basic position, having looked fairly hard at this record, and as this record discusses the position of United, it seems very clear to me that absent some source of economically minable reserves the United Electric Coal Company [263] does not have much future in terms of its ability to sign supply contracts with electric suppliers.

If I recall, the uncommitted strip reserves of the United Electric Coal Companies, they were of the order of magnitude—and I wouldn't want to be plus or minus two million tons here, but the order of magnitude of nine or

ten million tons. That is, if I remember the record, something like the whole sum of its uncommitted strip reserves of minable quality. I am excluding there the Industry Field reserves, which I read the testimony to argue are not currently an economically viable, strippable, deliverable source of coal.

If that is so, all of those reserves put together are hardly enough to sign one 20-year contract for a million tons a year; they are not half large enough for that. Moreover, those reserves, as I recall, are not all in one place, although I forget exactly where they are.

If that is so, that is, if The United Electric Coal Company is not any longer, without acquiring new reserves, an active competitive factor in the future's market, then its impact competitively in that market as an independent [264] entity is not very large.

But how its acquisition by any company would be regarded competitively depends not only on its position but on the position of the acquiring company. And I don't know enough about Peabody. I know about Peabody that it is a very large company. I think acquisitions by the very largest company in the industry are always looked at, and should be looked at, more closely than by smaller companies.

I am not trying to avoid the question at all. I am saying that on the basis of my general knowledge it seems to me that one would be more likely to find an anti-competitive effect in that merger than in this one, but I don't know enough about the facts to say whether the anti-competitive effect would be so large that it would lead a Judge to find it illegal or not.

Q. Well, Professor, if it is so, that United Electric is not an active competitive factor in any market, then what difference would it make who bought United Electric?

A I did not say it was not an active competitive factor in any market.

[265] I think that it has reserves, it has personnel, it has an organization, it has equipment, it is a going concern. It has, among other things, certain deep reserves, which may be of value to an acquiring company that

has the capacity to evaluate them. I am not enough of an expert to know what the quality is of its deep reserves in—I think it is Round Prairie that is its major deep field.

I think one has always to ask the question as to whether its acquisition by Company X changes X's position in its market in such a way to adversely affect competition, and I think that Peabody, being a large producer, one should look at that question. I think that Freeman, being a major producer, that clearly this case is looking at the effect of this merger on Freeman's position.

I think that we are concerned, all of us, with the effect on competition, and that is concerned with the viability and the competitive position of each of the competitors in a market.

Q Professor, in your view, in what market or markets is UEC an active competitive factor?

A It is certainly an important current producer and an important past producer in the electric [266] utilities' energy market as a source of fuel from several of its mines. It also, I am sure, has—I know; I remember. It has significant sales to other markets as well, but let me concentrate on utilities' market.

I think that the problem United faces, and, I gather from some of the deposition testimony, has recognized that it has faced for at least ten years, maybe for fifteen, is that it was not acquiring reserves at the same rate it was exhausting these reserves, and thus its future competitive position has been shrinking. It is, of course, continuing to produce on existing contracts, and it has a non-negligible—I think that if the figure I gave you from memory was approximately correct, of nine or ten million tons, that is not a negligible amount of high-quality economically minable coal, and that that will play some role in the market.

I think perhaps more important is that it has a going-concern capability, of sales personnel, of strip-mining personnel, of executives, of others, that, I gathered from, I think it was Mr. Weir's report, are in short supply, that mining [267] personnel is hard to come by, and this is clearly one of the things that The United Electric

Coal Companies have, and that that is an asset to the people who own that company.

Q What about its financial position, Professor? Would this also be an asset, in your opinion?

A Well, clearly it has reserves which it acquired advantageously, and which it is mining at a profit. Presumably, whoever owns this company has those profits, and in a market where capital is a scarce commodity and interest rates are as high as they are, this is clearly an asset of some value. I wish I had acquired United Electric Coal Company sometime ago. I would be delighted to be receiving these profits.

Q You would then consider United Electric to be a highly profitable coal producer?

Well, I don't want to put that in any words.

At what level of profitability would you consider United Electric?

A Well, I think it is quite clear, if one looks at the acquisition price by the company of its reserves, and the sale price of that coal, that it is indeed highly profitable. I think that to whom [268] those profits accrue depends on when one bought into the company, if one were a stockholder, and so on.

* * * *

[269] BY MR. CUSACK:

Q Professor, I direct your attention to page 8 of your report, under numbered paragraph 4. The sentence states:

"The increasing predominance of the electrical utilities as purchasers of steam coal, the increase in the designed capacity of new electric generation units, and utilities' insistence on a large, reliable, and low price source of fuel over the 20 or 30-year life of a generating facility, has led inexorably to the emergence and survival of coal producers with large reserves, developing large mines which are devoted to serving a small number of customers on long-term contracts."

Professor, in your opinion have electric utilities forced mining producers to construct larger mines with larger quantities of dedicated reserves?

~~A~~ Only through market pressures. If they have forced them to do so, it is only through the desire of the coal companies to retain their position in competing for the electric utilities' business.

My I just, at this time—as you read [270] that quote, I think you did not read precisely what I had written there, and I would like to correct the record.

I think at one point you said “has led,” and my statement says “lead.” It may not be important, but I would like to have it correctly in the record.

Q Thank you.

A You are welcome.

Q Professor, is it your opinion that the electric utilities and not mine producers have initiated the growth of larger mines with larger quantities of reserves?

A No, indeed, Mr. Cusack. It is, I think, the virtue of a market competitive system that the supply response to demand changes are accomplished through the market. That is indeed one of the beauties of competition, and why we are all devoted to free markets and competition.

If I decide that I want a color television set and lots of other people do so, in one sense you may say we force the television manufacturers to provide color television sets, but in another sense they are just responding to the opportunity to get that [271] portion of my expenditure.

Q Professor, do you know whether a coal producer would rather supply coal under a long-term contract?

A I believe on average and in general they would prefer so to produce coal, but of course whether a contract is satisfactory depends on lots of things, including the price you get for your coal. There is no general answer to that question possible.

Q I am going to give you the following hypothetical, Professor:

Assuming that a generating station will require 30 million tons of coal to supply its fuel needs for the life

of a particular generating station. In your opinion, Professor, would the utility prefer to have one mine supplying the total of 30 million tons of coal—that would be one million tons a year for thirty years—or would they prefer to have five mines supplying a total of six million tons each over the next 30-year period?

And is it not a fact that the delivered price per Btu would be the prime consideration rather than the number of mines supplying the coal?

[272] MR. HEDLUND: You have asked him two questions. To which do you want him to respond first?

MR. CUSACK: The first one, and then the second one.

MR. HEDLUND: The first one first?

MR. CUSACK: Right.

MR. HEDLUND: Do you have the question, Dr. Steiner?

THE WITNESS: Yes.

BY THE WITNESS:

A I think taking into account all of the factors that go into it, there probably would be some advantages to the utility in having a single contract with a single mine, for two reasons: One reason, I think it would probably be getting uniform quality of coal, which perhaps would be an advantage in terms of its boiler utilization; and second, I think it would be likely to be able to negotiate a more favorable price to it with a single mine than with five mines of six million each.

But clearly, as you suggest, its effective delivered energy cost is what it is interested in, for the reasons, I think—not withstanding the [273] answer to your second question, that seemed to be suggesting a negative answer to the first, and the reason I think that isn't appropriate is, it seems to be that both in terms of the uniformity of coal quality and the ability to negotiate a favorable freight rate, it might very well be advantageous to have a large-scale contract that would support a unit train. And my guess, without really knowing, is that six mines providing five million tons over thirty years would involve a variety of locations and a

variety of freight rates and would be less likely to be satisfactory.

BY MR. CUSACK:

Q Professor, assume a strip coal producer, with an annual cash flow of between five to seven million dollars a year, that has been successful in strip mining and has failed to develop new reserves, either strip or deep, to replace reserves at existing mines which have been mined, would these facts have the effect of diminishing competition in the bituminous coal industry in the area in which that coal company had been competing?

A I don't understand the question, Mr. Cusack. You said diminish. Does the cash flow diminish compe- [274] titution

* * * *

[276] Q Thank you.

Professor, the first sentence at the top of page 4 of your report, numbered paragraph 5, states:

"The progressive disappearance of the small producer reflects the disappearance of the railroad market and the decline of the space heating market, the retail market and spot coal purchases by utilities."

Professor, do you have an opinion as to why utilities have reduced their spot coal purchases, if in fact such is the case?

A Let me pass on the question of what the volume of coal purchased by utilities on the spot market is, because I don't have those statistics in mind.

It is clear to me that the supply conditions, and that the demand conditions in other fields, have decreased the profitability of supplying coal to the spot market because the spot market largely depended on kinds of customers such as the residential consumers, and so on, who purchased coal [277] that way.

I think this was discussed at length in—was it Mr. Peterson's deposition? Was he the Chicago retail coal dealer? It was discussed at some length, and it was sometime ago that I read it, but if I recall, he discussed the shrinking of the demand side of that market.

As that demand for spot coal shrunk, the number of firms supplying it necessarily shrunk, because there was nobody to buy their coal, and if that market and that whole pattern of marketing decreases, then the potential short-run supplies that could be diverted into the utility market would necessarily decrease.

What I am saying, I think, is that that market basically existed to supply spot purchases from spot suppliers. When such a market exists, there is an opportunity, if their excess supply is building up, excess inventories, for utilities to pick up coal cheaply in the spot market. I think the utilities clearly are always interested in picking up cheap coal if they can do it, and I think there is less cheap coal available.

It is perfectly clear in the record, I [278] think, that utilities are unwilling to design boilers, locate plants, and so on, depending on a spot market, that they seem to be desirous of having an assured supply for the bulk of their requirements. But of course they are in a position, if they can use cheap energy, whether in the form of interruptible gas or spot coal, if it meets their requirements, to use it.

Q In your view, Professor, which came first: the desire of the electric utilities not to purchase spot coal, or the unavailability of the spot coal?

A I would think the unavailability. I would think that the shrinking of the spot market is readily understood in terms of the disappearance or decline of these other markets that are mentioned. I think it is related, in the sense that I think it is the only demand for spot coal, with the incidental demand of utilities for fill-in coal.

This would not be an attractive way for small companies to make a living, because the price that utilities will pay for that coal, in terms of energy units, would have to be less than the energy they can receive on long-term contract. And be- [279] cause of, among other things, several handlings, and so on, higher freight rates, the absence of bulk freight rates, it is perfectly clear that if the utilities are going to get a bargain in terms of spot coal, the producers of spot coal are not

going to have a bonanza in producing for that market.

Q Do you know whether the utilities desire to purchase a substantial amount of spot coal?

A From what I know of the utilities and of the motives of businessmen in general, I would think that if they could buy it cheaply enough, they would be willing to buy a great deal.

I think that the purchase of fuel by sophisticated fuel users is based very much on the delivered cost to them of Btu's, with, of course, the other considerations of the suitability of the fuel for their particular boilers, and so on.

Q Professor, do you know whether the disappearance of the spot coal market has been in any way due to the desire of the coal producers to sell their coal under long-term contracts?

A I think once again, Mr. Cusack, I have difficulty with that question, only because in a [280] marketed kind of economy, all the parties to it have hopes, have motives, and react to market signals, but that basically it is the market forces of supply and demand as they bear on both demanders and suppliers that leads to the results it does.

The reason coal producers, I take it, supply on long-term contracts is because it turns out they can make more money that way. They don't desire to do that for its own sake; they don't do it because there is something elegant about a long-term contract. I am sure if they could make more money selling on a spot market, they would do so. If a particular management didn't do so, that management would do less well with its companies than companies that responded to the market signals.

So that these responses seem to me to be market responses of a competitive market, and precisely the kind of allocational decision that competitive markets and free markets do so well.

Q Professor, I direct your attention to page 4 of your report, Steiner Deposition Exhibit 2, under numbered paragraph 5, the second to the last sentence, which states

[281] "Typically, the opening of a mine is geared both to a given long-term contract, a given plant location, and a previously negotiated freight rate."

Professor, which mines were opened under these conditions?

A I cannot answer that question.

I think that my information here comes heavily from the record, whether the Tarzy deposition or the Nugent deposition or discussions of Netschert and Gerber. It seems to me these facts I believe to be the case, but they are my impression of reading the record.

I cannot tell you that a particular mine was opened—I know that there are particular mines that have been opened after negotiation with a particular contract, and that mines have been opened in response to them, but I do not know the names of them or the locations of them specifically.

If it becomes important to you, I expect I could search the record and find some illustrations, but I have no knowledge other than that which is in the record.

Q Concerning the sentence on page 4, under [282] numbered paragraph 6, which begins on page 4 and ends on page 5, it is as follows:

"For the same reasons, the comparative competitive stretch among coal producers and their prospective market positions should be measured by the quantity, quality and location of their reserves, rather than by their current or past levels of production."

In reference to this statement, Professor, I take it that in your opinion it would be impossible to measure the competitive strength of a company by examining only the quantity of its reserves, is that correct?

A Do you mean independent of their quality and location? Yes. I think that quantity alone would tell you not enough.

Q Would it be possible, in your opinion, to measure the competitive strength of a company by examining only the quality, quantity and location of its coal reserves?

A No. I think additionally we would need to know

something about its capability to translate those reserves into coal. It would obviously have to have or be able to acquire mining capability.

Q Would this be personnel capabilities and [283] financial capabilities? Would that be involved? Would that be important?

A Well, I think all of those things are important. Which would be likely to be critical constraints on its ability, I don't know.

I assume, and I think the reason that is left out of the paragraph, is that having said that these were coal producers, one assumed that they had at least some capability. But obviously, for coal to be competitive in production it must be produced; and thus, if I owned reserves, I would have to either hire someone to mine them, or I would have to acquire an organization to hire them, and that might be a formidable barrier.

So you are perfectly right, that that statement, as it stands, could be modified, and perhaps should be, to say "producers with appropriate capability should have their market positions measured by quantity, quality and location."

But I think the point of the paragraph that I am concerned with is that those three aspects are all important to quantity, quality and location of reserves and that these things collectively seem to be more important than the current or past [284] levels of production.

Q I understand.

Professor, I assume it is your view that coal reserves differ in value.

A If I understand the question, the answer is yes.

Q What do you take to be my question?

A I take it you mean that different coal reserves differ in value from one another.

Q Yes.

A Both in terms of their value per ton, and then the number of tons available, and so on.

Q Yes.

A I suppose they also differ in value from beer.

Q Hopefully.

A I smiled in that last question, Mr. Cusack, because students are fond of making statements that involve a comparative without indicating what they compare to, and as a professor, one is continually reading examinations that say X is better, without saying what it is better than.

Q I assume then, Professor, it would be impossible to determine the market power of a coal [285] producer by looking only at the quantity, quality and location of its reserves, is this correct?

A I thought we had just, in the question back, one or two, gone through and said that no, it was not possible to look just at those; we also had to look at its organizational, financial and other capability of converting those reserves into production. But if there is a new question, would you repeat it?

Q No. That is fine, Professor. Thank you.

Sir, the mere fact that a coal producer has, in the last three or four years, increased its total coal reserves from, say 300 million tons to 550 million tons, would, I take it, not be too significant unless you knew about the quality and the quantity and the location of the reserves, and something about the organization and the firm's financial capabilities. Is this a fair statement?

A No. I think that I could not evaluate the significance of that without knowing about these other things. The significance of the reserves would depend not on my knowledge but on the facts of the reserves.

Q And the facts of the organization owning [286] the reserves, I assume?

A I am now a little bit confused. I wonder if you would state that again. Either we could have the whole thing read back, or if you would state as a complete sentence the question I am now being asked.

Q Assume a coal-producing organization increased its coal reserves substantially, say perhaps doubled in a period of three or four years. This would not necessarily, in and of itself, indicate that this coal company's market position had doubled in this period of time, would it?

A No. Of course, it does not by itself definitively determine anything.

If one assumes the company was intelligently proceeding with its business of producing, one assumes that it thought it increasing its quantity of usable reserves, and this suggests one would want to look more closely to see what the effect on its competitive and market position was.

Q It is a fair statement to say, then, that if a company increased its reserves, it has done so on the assumption that these reserves would be utilized. Is that a fair statement?

[287] A Well, I am sure that at the time it acquired them, it assumed it would be useful or profitable, yes.

Q Professor, I would like to draw your attention to the first sentence under numbered paragraph 7 of your report, on page 5, where you state:

"The growth of mine size and the share of production by large coal producers is a direct response to the intense competition for the utility business both between coal producers and among competing fuels."

Do you have any qualification to make in regard to that sentence, Professor?

A I am not sure what you have in mind. I think the sentence is, as first sentences tend to be, an introduction to the whole paragraph, and I think that to get the meaning of the sentence and its contextual basis, one would best read the whole paragraph, and I am about to do that. If then the question is, do I want to modify the view expressed in that paragraph for which that sentence is the lead in, I will be glad to answer that, if I may have just a moment to re-read it.

Q Yes, sir. Please do.

* * * *

[292] Q Professor, are you under the impression that it is impossible for a coal producer to acquire coal reserves from another coal producer?

A No. I don't think that is impossible. I think that one of the ways one acquires those reserves is to buy the companies.

Merger is clearly—when one acquires a company via merger, one acquires all of the company's assets, and among those assets may importantly be its reserves.

Q Do you know whether it is possible for a coal company to acquire merely a portion of the coal reserves of another producer?

A I would be amazed if it were not possible to purchase specific reserves.

I would say, if I might expand on that, that since reserves seem to be the life blood of a company, a producing company that sold its reserves would be in some sense limiting its future, and it would be more likely to do that by selling its whole organization then by merely selling its future and retaining its equipment and its operating personnel.

* * *

[303] BY MR. CUSACK:

Q Directing your attention to that time, Professor, in your opinion was United Electric a [304] firm which was heading inevitably in the direction of bankruptcy, with the grave probability that failure would ensue, that is, that the trend was irreversible?

A It is not my opinion that it was heading toward bankruptcy, in a way irreversible or other.

Q And Professor, is it your opinion that at the time in question, November of 1966, there were available to United Electric no reasonable, possible distinguishable or feasible alternatives which would have permitted United Electric to remain an independent competitive factor within the bituminous coal industry?

MR. KEMPF: May I have that reread, please.

Q (Read by the Reporter.)

BY THE WITNESS:

A May I answer that question in two parts.

It is perfectly clear that in terms of its existing contracts, as of that time or as of this time, United Electric would continue, for a substantial period of time, to be a

producer, if it did nothing more than to produce and deliver from its existing mines on its existing contracts.

[305] Nothing that I say is designed to undercut that, as I think it fact.

It seems clear that without doing something, this was a company that might have appeared not on the verge of bankruptcy, but in the process of liquidation in terms of its, as I understand it, reserve position.

I do not, in general, know all of the opportunities that might have been before it to compensate for this inadequate reserve position. I read the record as having said that the option of acquiring new strip reserves was effectively closed to it; I read the record as saying acquiring deep reserves and developing a deep mining capability independently was not effectively open to it.

I do not know, and have not investigated, whether other mergers might have been as acceptable a solution to it or as feasible a solution to it as the one that was—

If I remember the record, by that time, it seems to me, 50 per cent of its stock was already owned by either Freeman or Material Service or General Dynamics, that this process of stock acquisition did not begin in 1966 but it started ten [306] years or so earlier than that.

So without knowing what all of the possibilities were, it seems to me that the possibilities of acquiring strip reserves or acquiring underground capability, appear to not have been still available.

I do recall, in the record, a discussion of a much earlier series of discussions, perhaps going back to 1954 or 1955, of a possible merger with Truax-Traer. I take it that subsequent mergers have made that possibility no longer available to it.

BY MR. CUSACK:

Q Would you please direct your attention to page 5 of your report, sir, to the statement in the middle of numbered paragraph 7, stating, and I quote:

"The fact that coal continues to supply so much of the energy requirements of the electrical utilities

reflects the success of coal producers in delivering coal at a low cost per BTU."

Other than the electric utilities, Professor, do you know of any other fuel consumers [307] in which a choice of fuel is decided primarily on the basis of delivered Btu price of fuel?

A I think any fuel user has, as one element in his consideration, the cost per unit energy delivered. I think any producer considers other characteristics as well.

MR. HEDLUND: Did you mean to say "producer"?

THE WITNESS: Excuse me. Any consumer. Thank you.

BY THE WITNESS:

A I think the electric utilities, by virtue of their very, very heavy consumption of fuel, are particularly concerned with that. I am sure that persons who use fuel for home heating are concerned with the cost per unit of energy, but they can perhaps afford to be more concerned with the convenience in handling, with the cleanliness, and with other aspects of this. I suppose that industrial users of fuel always consider the cost per Btu as one among the many things they consider.

I recall some testimony about one producer that was manufacturing its own electricity—

MR. HEDLUND: One consumer?

[308] THE WITNESS: One consumer. Excuse me.

BY THE WITNESS:

A This was perhaps St. Louis Steel. Keystone—

BY MR. CUSACK:

Q Keystone Steel and Wire Company?

A Yes. Mr. Redard, I think, testified that at some stage they stopped consuming coal to manufacture electricity, because they were persuaded it was cheaper to purchase the electricity, and there may have been other reasons in that.

So I think my answer to your question is, I assume everyone who uses coal for the purpose of producing, he pays some attention to the cost per Btu. The question as to whether that is the single, most important

consideration or merely one among many, would presumably vary according as the fuel cost is an important cost in the final product being produced.

Q Professor, is it your opinion that coal is the lowest priced year-around fuel in delivered Btu's for the generation of electricity in Illinois?

A I think that one has to answer then the question of specific locations.

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[319] I think in any industry where there is substantial competition, that is, where there are several suppliers, a buyer is in a position to have a choice among several suppliers.

I think in those industries where the buyer ~~possesses~~ what would be called substantial monopsony power or oligopsony power, where it is a concentrated buyer, where it is one of a relatively small number of buyers, he, the buyer, possesses a kind of bargaining power in these negotiations that may indeed be greater than in a situation where he does not possess it.

I think to take a situation, if I remember the statistics, where Commonwealth Edison is buying 17 or 19 million tons of coal a year, it is a very big coal buyer vis-a-vis virtually all of the coal producers. It's bargaining power therefore, and its ability to put pressure on those companies to sell to it at reasonable prices, is very substantial. It is much more substantial than if it were consuming a hundred thousand tons of coal a year. I would think that if faced with the same set of suppliers, I would expect to get a better price if I were buying 17 million tons a [320] year than if I were buying a few hundred thousand or even a million tons a year.

So in this sense, comparing this against an industry that does not have that kind of buying power, I would think it would be substantial.

I would think, second, that since the utilities have alternative sources of fuel, that is a bargaining weapon that they have when they go into negotiations. When they are talking about negotiating a contract with a coal producer for supplying, let us say a new facility,

the mere threat that "Well, we can design this thing so as to use nuclear power instead, if you don't make us a reasonable price on this thing," is a further source of bargaining advantage, which is not always available in other industries.

I share Mr. Hedlund's view that I am not sure what "the average industrial situation" is. This is clearly a situation where there is significant buying power, and where, moreover, the utilities not only have buying power but seem to have substantial information. They are not, in any sense, uninformed buyers. They know what they are getting, they have presumably tested the coal, [321] they know its chemical properties, they know the engineering problems it might lead to, and what the alternatives are.

I think the evidence is replete that coal buying is one of the most important activities of electric utilities, and that therefore, since it is an important and high payoff activity, high-level talent is devoted to the problem of coal buying.

BY MR. CUSACK:

Q Do you recall any testimony, from any of the depositions or otherwise, where a gas company either approached or was approached by a public utility for the purpose of the public utility using gas as an alternative to coal?

A No, I do not.

Q Would your answer be the same for oil?

A I do not remember, in anything that I read, discussions of specific approaches by either oil or gas producers to a utility.

I do remember, although precisely where, I don't know, some of the utility people saying that at the time they constructed facilities they considered alternative fuel supplies and had that [322] as part of their basic decision.

* * *

I would think that a large automobile company negotiating with the fifth or sixth largest steel company might have more bargaining [323] power than the fourth

largest automobile company negotiating with the first or second largest steel company; that is, even within those two industries there can be, as you know, great variance in the market occupancy. Within the automobile industry there is a tremendous difference between General Motors and American Motors; within the steel industry there is a tremendous difference between U. S. Steel than with the smaller but still substantially large steel companies.

Q So would it be true, Professor, to say that in the public utility industry and in the coal producers in the Midwest there are a number of instances where public utilities are at a much less bargaining power than some of the coal producers?

A I think I agree with what you are saying. Let me restate it, to make sure that I understand it.

It is very clear that among the utilities, as well as among the coal producers, there is substantial variance in size. I think Commonwealth Edison and TVA, being two buyers, clearly are very large companies, with substantial bargaining power no matter whom they deal with. [324] There are also many smaller utilities and many smaller coal companies. If one deals with the negotiations between a relatively small utility, small now in terms of its total fuel requirements, let us say, its bargaining power vis-a-vis Peabody or Freeman may be much less than that of TVA vis-a-vis the same producers.

So that where there is variance in size of individual firms, to characterize relative bargaining powers accurately one ought to look at individual negotiating situations. To characterize it on average, and to say that utilities as a whole have substantial bargaining power, makes sense if you are comparing it to—not to steel, where it is also complicated, but to a highly unconcentrated set of purchases, in perhaps clothing manufacture, or something of that kind.

Q On page 6, under numbered paragraph 9, the second to the last sentence is as follows:

"Moreover, some utilities possess their own coal reserves which add to their bargaining strength."

Would you please name, sir, the public utilities in the Midwest which possess their own [325] coal reserves?

A I am not sure I can name them all. In fact, I am sure I can't.

I remember that Consolidated Edison owns certain coal reserves. I believe—

MR. HEDLUND: You meant Commonwealth Edison?

THE WITNESS: Commonwealth Edison. Excuse me.

BY THE WITNESS:

A I believe Mr. Nicoson, testifying that the Indiana Public Service utility—the precise name, I apparently don't remember—I believe he testified that they had acquired, and I believe still held, coal reserves, and that they were of some value to the company in its negotiations.

I am sure there are others. I don't, offhand, remember them.

BY MR. CUSACK:

Q Professor, directing your attention to the sentence on the bottom of page 6 of your report, under numbered paragraph 10, which is:

"In the context of this litigation, anti-merger policy should seek to preserve [326] a sufficient number of alternative sources of supply to customers to assure competitive behavior."

Professor, does the presence of several coal producers in a position to supply a particular customer, is this needed to assure competitive behavior?

THE WITNESS: I wonder if I could have that read back.

MR. CUSACK: Let me rephrase it, and make it a little more intelligible.

BY MR. CUSACK:

Q Is the presence of several coal producers, in a position to supply a particular customer, needed to assure competitive behavior?

A I am not sure how many is the number that is required. In part, this depends on the size and bargaining power of the purchaser. One would think that typically at least two or three potential suppliers would be required if the customer did not have extraordinary bargaining power.

I am not, in just the abstract, prepared to say whether the number of competitive sources of supply a particular consumer must have should [327] be three or four or five or eight. It seems clear it should be greater than one.

[329] MR. HEDLUND: Do you intend to use his [330] book as evidence?

MR. CUSACK: We have not decided that.

BY MR. CUSACK:

Q Professor, it is my understanding that it is your position that you cannot look at the competitive impact of a merger without looking at a certain market or markets, is this correct?

A It is my position that competition occurs in markets. It is not independent of a market or set of markets. Yes.

Q And you have to then examine some sort of a market to determine the legality of a merger. Is this true?

A I think I have said several times, and I say again: I do not think it is up to me to say how you determine the legality of a merger. There are judicial procedures for that.

I think that in order to determine the competitive effect of a merger, one has to look at where the competition takes place, and where then it is affected, and that is in one or more, and I emphasize the fact that there may be many, markets.

Q Professor, what markets, in your opinion, [331] do UEC and Freeman operate in?

A I think the principal markets they operate in involve the sale of steam coal to electric utilities for the purpose of generating electricity.

Q Where, sir, particularly?

A Within this general Midwestern area.

I think that their customers, and there are numbers of them, are in some markets—not all in the same markets. It is clear that, as we were talking about earlier, the problem of determining the source of supply to particular customers has to be looked at.

I think, if I remember the record and the data in the case, and this is now going back, that Freeman is importantly, in terms of tonnage, engaged in the metallurgical coal market, which I think is a distinguishable market. I think that both Freeman and United sell a certain amount of coal to cement companies, both sell to industrial users, and I forget how it tapers out. My best recollection is that something like 60 or 70 per cent of the coal of each of those is going into electrical generation, and the rest is distributed, [332] not necessarily evenly, among other types of users.

* * *

A I think that statement of the question almost has the situation backwards, and I am having [333] a little difficulty getting at what you are driving at.

Whether or not two companies are in effective competition for a given supplier is whether they are practicable alternative sources of supply.

If the situation is that coal producer A in your hypothetical is offering to sell coal substantially below the price of coal producer B in that area, then coal producer B apparently is not an effective supplier at that set of prices, and might indeed not be a real alternative source of supply to a customer at that location.

I can visualize a situation at which, if coal company A is in a position to deliver at one cent per Btu or a tenth of a cent per Btu below another customer, that that is a relatively small difference in costs, and that this is then a feasible alternative. One is talking then about the size of the differential, as to whether the situation is likely to change.

What I am trying to suggest is that two coal companies, let's say located at different places, and therefore with different freight [334] schedules as they move along a railroad or move toward each other, are likely to have some zone in which their delivered prices per Btu, other

things being approximately equal, are in what I think you earlier called a price range, that is negotiable, let us say, with a particular buyer. Perhaps at the mine mouth of one plant and the mine mouth of the other there is such a wide difference in the delivered prices that there is no effective possibility of them competing for particular customers. I don't know if that is clear.

What I am saying is, it is not true that there are totally separate market areas. Between any market areas there are zones of overlap of competition for which, for some user, may make those two sources of supply close enough to one another that it pays to negotiate with each of them.

* * * *

[338] In the mine A and the mine B, the cost from mine A to facility X being \$4.00, and from mine B being \$4.10, assuming coal is sold from mine A to X, and coal is sold from mine B to X, that even with this price differential, this is actually going on. Would this indicate to you, sir, that mines A and B were in competition for the coal purchases of X?

A It might indicate several things, and that is one of the possibilities.

It might indicate that one set of conditions had pertained in the past, and that had led to a contract with firm B, but then the conditions and rates had changed, and a new contract had been made with A. It might mean that there were differences in the quality of the coal not visible to the statistical eye, when it recorded this price, that were important to the consumer; it might mean several things.

I would say that in general, where, in terms of current transactions, two suppliers are both supplying in a given area, one would presume that those suppliers are in fact competing in that [339] area.

* * * *

[344] I don't think that in the facts in this case we are at the point where this market structure and the size of this company is by itself so strong an indication that I would be satisfied to look at that and nothing else.

I think that this conclusion was based on looking at the whole picture, and that of course included some attention to market structure.

Q The next question I would like to discuss with you, Professor, is on page 8 of your report, and it is the following sentence:

"Third, because of differences in the location of its mines, in the quality of its coals and in the nature of its transportation routes, Freeman and UEC have long been predominantly complementary rather than competitive producers."

Would you tell us, sir, what you mean by the term "predominantly complementary producers"?

A Let me first state what I mean by "complementary," and then we can come back, if you like, to "predominantly."

It seems to me that producers are com- [345]plementary if coal from one is used to supplement coal from the other rather than to compete with it.

Remembering the record, and I probably remember it imperfectly, it seems to me there were a number of illustrations of that kind. One I recall, that when the United coal from the Mary Moore Mine ran out, it had an uncompleted contract with a utility, Vermilion Power, perhaps, and Freeman coal was shipped—I hesitate to say on my memory just from where, but Freeman coal was shipped to complete that contract which United was unable to complete from its original mine. I would consider that to be a complementary use.

I guess I would regard the shipments from United's Fidelity Mine to TVA on a Freeman contract, which were discussed at length, I think by Mr. Tarzy, and perhaps in other places as well, as a complementary usage; complementary in two senses: This was coal that was supplied on a Freeman contract that would not have been perhaps used by itself or contracted for by itself. It was also complementary in the sense—I think that was coal that, in the summer months, would have gone up the Mississippi River to Wisconsin [346] or Minnesota stations, and because of the river being closed, Mr. Tarzy, I

believe, testified they could keep the mine open by shipping it to a TVA station on the Freeman contracts.

Another complementary use concerned the possibilities of using dust from one mine, with screenings from another, to get a mixture that burned effectively. I think that in the record there was some discussion of using some dust from the Southern Illinois mines of Freeman, I think the Orient Mine, with the Fidelity screenings, in providing a mixture that was usable by—was that Union Electric Company in St. Louis? Again, my remembering of the details—

All of those seem to me to be essentially complementary uses, where basically a contract either relied on coal from one or the other, and some coal was shipped from the other company because it was possible to use on a fill-in basis in such a way as to increase the efficiency of the total operation; or a case where the coals from the two sources had to be mixed to make an effective blend.

I think there were other cases as well, [347] but those stick in my mind. It struck me, as I read it, as the sorts of efficiencies that might be found in a merger of the operations of these two companies.

Q Professor, if United Electric was able to supply the Tennessee Valley Authority, from its Fidelity Mine, with 213,000 tons of coal in 1967, with 254,000 tons of coal in 1966, and with 263,000 tons of coal in 1965 under a Freeman contract, why would not United Electric be able to supply this independently of Freeman?

A I think I recall in testimony, I may be mistaken, that Mr. Tarzy, and perhaps Mr. Nugent as well, testified that they could not do so, that TVA was not interested in contracting for Belleville coal except in conjunction with the contract from the Southern Illinois mine. But again, if my recollection of that is wrong, then the record will show it.

I think the fact is, they did not have a contract with TVA on their own at any time, but I may be mistaken on that. But that is my recollection.

Q Professor, if United Electric and Freeman [348] had been independent at the time of these shipments to

TVA under the Freeman contract, in your judgment would it have been possible for United Electric and Freeman to put in a joint bid, assuming the companies were separate?

A Economically, of course it would have been possible. I don't know what the either administrative or managerial aspects or the legal aspects are of that kind of a joint arrangement.

Q Professor, I would like to show you a chart entitled "Common Known Customers of The United Electric Coal Companies and Freeman Coal Mining Corporation Showing Destination Points—1967."

A I think I may have a copy of that. Is that this chart (indicating)?

Q Yes, sir. The revised one, for 1967.

A All right.

Q I ask you to glance at this chart and direct your attention to it, and I ask you, sir:

Other than your testimony in regard to the TVA matter, and I believe you mentioned the Union Electric sales, what other sales by Freeman and United Electric here, as set forth in this chart, which is for 1967, be what you would consider to [349] be complementary sales?

A I think if we may, we had best go through the chart and divide them, and let me start by saying that I think that one has to pay attention to the facility as well as to the company. I would not regard as common sales, sales from the two firms to different facilities of the same firm.

Q Why don't we take it on facilities first.

A Fine. It seems to me then, if we start with this thing, the Caterpillar Tractor case, which is listed first, appears to be sales to different facilities, so it is not a common—

Excuse me, sir. One question on the Caterpillar.

What if Caterpillar can direct the shipments of coal to its various plants?

A I am not sure what you are asking me. I think that you must tell me more.

Is Caterpillar buying the coal at mine mouth and taking delivery there on contracts?

Q Yes. Let's assume that.

A If they are buying coal at mine mouth, and in fact characteristically mix the locations of the coal from the two mines, this would clearly [350] seem to me a case of where they regarded the two mines as substitute sources of supply that in fact were interchangeable. I have no reason to think that that is the fact with these shipments that are here involved.

Q May we go to the next one, sir.

A Yes. The next one is a Commonwealth Edison shipment. I don't know the facts of this, but suppose that that is a shipment to a common facility.

Q Yes, sir.

A And I have no reason to think it is complementary, though it may very well be a competitive shipment to that facility.

The next one is listed, Central Illinois Light Company, and appears to be—

Q Those are different facilities, sir.

A Different facilities. Right.

The Meredosia Plant is the same facility.

Central Illinois Public Service. That, when I looked at the map, looked to me like one of these places where indeed it might well be that this Meredosia Plant was on the boundary. I believe it was on the Illinois River, south of the Banner [351] Mine, and could receive down-river coal there, and it was a fairly short rail haul from the Crown Mine. That is my recollection without looking at the map.

The Meredosia Plant, then, looks to me as if it was indeed a competitive shipment, in the sense that that plant could be reached either by the Cuba-Buckheart—

Q Or Banner, sir.

A Cuba-Buckheart or Banner. That is correct. There was a substantial 160,000 tons of coal there, and there was substantial coal from Springfield.

Q And what about the Grand Tower Plant, sir, of Central Illinois Public Service?

A Well, there the quantity of coal coming up from Fidelity seems so small as almost to be de minimis. I suppose I would want to know more about that, as to

whether 16,000 tons of coal was a significant shipment.

Do you have the data for other years? Is that a significant source?

Y Yes, your Honor.

A Thank you very much.

(There was a short interruption, after [352] which the taking of the deposition was resumed as follows:)

BY MR. CUSACK:

Q Professor, the 1965 schedule shows that the Fidelity Mine sold 15,000 tons of coal to the Grand Tower Plant, while the Orient No. 4 Mine sold 102,000, or actually 103,000 tons to Grand Tower, and the 1966 statistic shows that the Fidelity Mine shipped 17,000 tons of coal to Grand Tower, and the Orient No. 4 Mine shipped 100,000 tons, and the Orient No. 3 Mine shipped a little less than 17,000 tons.

A I think my question there, and it is only a question, is the kind of shipments that are by and large involved to these plants, that 16,000, 17,000 or 15,000 tons sounds like a small amount, and I truly would want to know what accounted for this rather small volume. Was this special coal, with special characteristics?

If you told me that two mines, one supplied 200,000 tons a year and another supplied 15,000 tons, was that an important area of competitive supply, it would seem to me not, unless the smaller shipment, shipment from the small mine, could readily be expanded.

[353] You understand that—

Q Yes. The smaller shipment has been relatively stable, though, has it not?

A Well, that leads me to suspect that perhaps it is used for some special purpose or has some special chemical characteristics or is mixed, or something of that kind.

I am simply saying that it is something that I would want to inquire further about, and I don't know.

Q Should we go to the next one, sir? It is Commonwealth Edison Company.

A Commonwealth Edison again, the River Stations, there is very clearly large shipment from both firms.

I think I mentioned that before, that that is a large tonnage. It probably ought to be interpreted in terms of the total purchases of Commonwealth Edison.

Q Would these tonnages be in competition, or would they be complementary, in your view?

A As far as I know, they are competitive shipments.

Q All right. The next one, Professor, is [354] Dairyland Power Cooperative, the shipments to the Alma Plant, the Fidelity Mine shipping a little over 35,000 tons, and Freeman shipping 77,994 tons.

Would you consider this tonnage to be complementary, or in competition?

A Well, I don't have any reason to think it is complementary.

Which mine is that from Freeman? Do you know?

Q We do not know, sir.

A Do you know which area? Was it from one of the Orient mines, presumably?

Q We really don't know. Perhaps Mr. Hedlund could tell us.

MR. HEDLUND: We have not checked your figures here, Mr. Cusack. This is, of course, your document, and we will do so. More than that, I cannot say at this point.

MR. CUSACK: Thank you. I understand.

MR. HEDLUND: I know neither whether the figures are accurate, nor whether they are accurate from which mines of Freeman, if from Freeman's mines that tonnage comes.

[355] But presumably, since a representative of the Dairyland Power Cooperative is going to be present to testify at trial, he can clear up any ambiguities still present.

MR. CUSACK: Thank you.

BY MR. CUSACK:

Q The next one is the E. J. Stoneman Plant of Dairyland Power, 7,600 tons from United Electric and 26,900 tons from Freeman.

How did you view this tonnage, Professor?

A Well, again, I don't know that it is complementary.

I assume it is competitive. It is not an enormous volume, but let's suppose it is competitive.

Q The next, Professor, would be Foote Minerals Plant at Keokuk, Iowa, 24,731 tons by United Electric, and 30,881 tons by Freeman.

What would your view be on that?

A I assume that is competitive.

Q You have already testified on the Tennessee Valley Authority matter, which is on the bottom of that page.

A Right.

Q Do you have any other comments to make on [356] the Union Electric sales?

A No. I am just really—here is where I am uncertain. I remember, I think it was Mr. Nugent's deposition, his discussing the competitive situation of the Southern Illinois vis-a-vis the Belleville Coal, and if I recollect, he used this Union Electric Company as an illustration of the fact that the only reason they were competitive was that they were using dust from Southern Illinois with screenings. My memory may be way off on that, but that is my recollection, that that was the illustration, and if it is, I would think those were primarily complementary, in the term as I was using it.

Q Professor, assuming that the illustration is correct, and I am not completely clear in my own mind on it. I mean, you may well have stated it correctly according to Mr. Nugent's deposition.

Assuming that United Electric's screenings were sold to Union Electric, to identical facilities in which Freeman sold dust to these facilities, and assuming these screenings are pulverized before being used by the generating stations of [357] Union Electric, would this indicate to you that the coal, in its final use, is in competition?

A The impression I was under was that the dust was not usable without being mixed with other coal.

Now you are telling me that that assumption is not correct? You are asking me to assume something else?

Q Yes. I asked you to assume that the screenings are pulverized into a dust.

A Put another way, is an implication of that that this plant could be run entirely by dust?

Q Yes. And that these screenings end up to be dust.

A Yes.

Q They may be dust at the plant where it is consumed, as opposed to the dust coming out of the Freeman tippie.

A I think on those facts, I would conclude that they were competitors, not complementary. That was not my understanding of the facts, as Mr. Nugent testified to them.

Q Yes. The question was based on my assumption. [358]

A Yes.

Q The next, Professor, is the Wisconsin Public Service Company facility at Green Bay, Wisconsin, the J. P. Pulliam Plant, 131,700 tons from the Fidelity Mine of United Electric, and 123,000 tons from the Orient No. 4 Mine.

A Right.

Q How would you view this, sir?

A Well, I have a dim memory here, and this may be ridiculous, of some coal that was going to Green Bay that was brought to Chicago docks and then mixed to meet certain chemical properties, and I don't know if this is the case of that or not. If it is, I would think there would be a complementarity involved, but otherwise I would think it would be competitive, and I simply do not remember whether this was the illustration where, in order to use—

If I recall, the Wisconsin Public Service Company was interested in high Btu coal, and had been, for a long time, using primarily Eastern coal, and about this time it shifted to using perhaps 40 or 50 per cent Illinois coal and [359] 40 or 50 per cent Eastern coal, but that the Belleville coal was not of high enough Btu, the Fidelity coal, and therefore it could only be used if it were mixed with Southern Illinois coal. In that case, I would think it was distinctly complementary.

As I now talk about it, it seems to be that the facts there were that the only way in which the United Electric Fidelity coal could be used in that boiler was in an intermixed form.

Q Would you say, Professor, that the mixing of coal, say the mixing of a lower Btu coal with a higher Btu coal, would take these two types of coal out of being in competition?

A No. I would say that if one is talking about making a long-term contract for the supply of coal to service a given facility, and if I were the public utility buyer, I would want to assure myself of the fuel supply I needed. And thus, if I were going to negotiate, let's say for Fidelity coal, I would have to simultaneously negotiate for some higher Btu coal to mix with it, and for the arrangements for mixing facilities, whether at the mine or at the dock or at the plant would affect [360] this. And I would think, in the mind of the purchaser, this would be a complementary acquisition of coal, if my assumption is correct that the Fidelity coal could not be used by itself in the boilers as they then had them. And for that reason, while it would be possible to negotiate this separately with different companies, I think it would probably be a good deal easier to negotiate it with a single company that could contract to provide, and presumably guarantee to provide, not only the volume of coal but the volume of coal in appropriate mixture so it would service the boiler.

You understand on this, my knowledge is derivative. I am not really a boiler engineer, and this is the impression I have from reading the record.

Q Professor, if the Wisconsin Public Service Company, Pulliam Plant, was being altered to take all Midwestern coals, to the exclusion of Eastern coals, would these shipments by United Electric and Freeman go from the complementary category to the competitive category?

MR. HEDLUND: Do you mean by that question, [361] Mr. Cusack, in the phrase "all the Midwestern coals," each and every one, regardless of Btu content?

MR. CUSACK: Yes.

BY THE WITNESS:

A I think we are talking about two different things. We are talking about these shipments which were made to a given facility, and that is one thing we can talk about. The other is, we can talk about if they were de-

signing a new facility, in the consideration of the design for that facility could they imagine designing a facility that would take lower Btu as well as higher Btu coal. And it is clear, as I think I have suggested earlier, that in the design stage, in the negotiation stage, Wisconsin Public Service would consider, and could consider as alternatives, high Btu coal, low Btu coal, gas, oil, atomic power, any one of a number of things. I think most anything is possible.

What I do not know is whether the economics of that situation are such that they would in fact find these two coals to be close substitutes on a delivered cost basis. I think that takes me beyond my factual understanding. [362] I think, more generally, that any facility could be designed to utilize any coal if it paid to do so. I think the record shows that. The question as to whether things are effective substitutes depends on the cost in supply picture.

Q Professor, would you please glance, just for a moment, at the schedule entitled "Percent of Sales of Each Company to Identical Customer Facilities by The United Electric Coal Companies and Freeman Coal Mining Corporation for the Years 1965-1967."

(There was a short interruption, after which the taking of the deposition was resumed as follows:)

BY MR. CUSACK:

Q Based on this chart, sir, can you conclude that United Electric and Freeman were in competition?

A I think I can't tell you enough from these figures. Percentages are always interesting.

One thing it does not tell me is whether the shipments to common customers were complementary or competitive, the kind of exercise we have [363] just been through, and I suppose that if I were concerned with a competitive overlap to common customers, I would want to take out what were the predominantly complementary shipments. By themselves, I don't think I can do that.

Obviously, a substantial volume of the coal is not complementary, but I don't know just how much of it, at this point. I have not done that arithmetic.

Q Thank you, sir.

MR. CUSACK: May we confer for a second.

(Thereupon a short recess was taken, after which the taking of the deposition was resumed as follows:)

BY MR. CUSACK:

Q Professor, how do you measure accurately the quantity, quality and location of reserves held by coal producers when trying to assess competitive viability?

A I think you do some work.

I think, to put the matter this way, if I were trying to sell some coal reserves that I had, to some coal producer, coal mining company, they would pay attention to the quality of that, and [364] I assume they would do the appropriate drilling necessary to find out how much coal there was, what its chemical properties were, and so on. I would assume the transportation people would look at the kind of transportation facilities that existed, and try and figure out how they could ship that coal to either known or expected or probable customers, what kind of a rate they could get, and then make an estimate of their profit possibilities. Included in this, of course, would be a discussion of the technical or other problems in mining the coal.

I think what I am saying is that for any particular coal field, just as coal companies are in the business of buying coal acreage, coal companies or coal appraisers should be in the position of making estimates of the values of these. I don't think that is an insuperable measurement problem, but I certainly don't have the competence to do it myself, if that is what you are asking me.

Q I show you a Defendants' Exhibit entitled "Coal Reserves of Companies in Illinois, Indiana and Western Kentucky—1968."

Is it fair to say, Professor, that you [365] believe that what you have just outlined would have to be done in order to meaningfully determine the relevancy of this exhibit?

MR. HEDLUND: You are asking the relevancy in terms of what?

MR. CUSACK: The competitive relevancy. Thank you, Mr. Hedlund.

BY THE WITNESS:

A Well, I think there might be some information in the exhibit as it stands.

I think that it is possible that the relative reserve holdings give a ranking or a percentage share, that it might well be that if these reserves are distributed over similar areas and have the similar likelihoods of having thick seams or thin seams, and so on, that there might be substantial index value in this. I think that to put a precise dollar figure on these reserves, of any of them, one would have to do appraisals.

I think if one wants to compare Island Creek, which here shows something like a billion tons, with United Electric which shows 121, that looks like eight or nine times as many reserves, crudely measured. Maybe that is an index of the [366] difference in value if you appraised them, though I wouldn't be sure if you appraised them that it wouldn't turn out to be only six times as great or as much as twenty times as great. With a margin of error, I think there is probably information in them.

I suppose, if I remember the kind of exhibit the Government used in ranking coal companies by production, that there might be more information in terms of competitive viability in crude reserve figures than in crude production figures, and counsel of perfection would say, "Let's have an appraiser estimate the economic value of all of these things," but I am not sure that that is necessary to form a judgment about important magnitudes.

It seems to me reasonably clear from these figures that Peabody has a lot of coal, that this Houston Coal Company doesn't have very much, and I don't think any appraisal would change that opinion.

BY MR. CUSACK:

Q Professor, does this chart indicate to you that coal reserves are unavailable?

[367] A In the sense of coal reserves additional to these?

Q Yes.

A I don't have any idea whether, beyond these 12 billion tons here listed, there are other reserves of equivalent quality.

I suppose the one suggestion in this that makes me think that reserves of this magnitude are not readily available is the fact that a lot of companies appear to have sunk a lot of money into holding them, and I know something about the cost of money, and so do we all. If one is going to tie up money—as we were talking about earlier—in reserves that one is not going to use for some years, one presumes it is because there is a scarcity of those reserves, in the sense that it is valuable enough to have the rights to mine them in the future than to tie money up in them now.

But I don't know from this how much people paid for these reserves, and whether they paid premiums above the value of the land for other purposes.

Q Professor, would you say that on the [368] basis of this exhibit the Bell & Zoller Coal Company had substantially more reserves than United Electric?

A Well, certainly on these crude figures, it seems to be between four and five times as much.

Am I reading the right lines? Is this 550, roughly?

Q Yes.

A Against 121.

Q Would it be of interest, in determining the significance of this exhibit, if Bell & Zoller had increased its coal reserves from 300 million tons in 1965 or 1966 to 550 million tons in 1968 at a cost of approximately one million dollars?

A I am not sure what the question is. Would it be of interest to whom, for what purpose?

Q Would it be of interest to you in evaluating the importance of the coal reserves as set out in this exhibit?

A Are you telling me that there are 200 million tons of coal acquired for one million dollars?

. . . .

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

Civil Action No. 67 C 1632

[Served December 4, 1968]

[Filed December 4, 1968]

UNITED STATES OF AMERICA, PLAINTIFF

v.

GENERAL DYNAMICS CORPORATION; THE UNITED ELECTRIC COAL COMPANIES; and FREEMAN COAL MINING CORPORATION, DEFENDANTS

STIPULATION

IT IS HEREBY AGREED AND STIPULATED by and between parties that Mr. C. C. Smith, Business Manager—Kentucky Department of Mines and Minerals, if called in this case to testify, would testify as follows:

1. The Commonwealth of Kentucky has enacted statutes governing the licensing and operation of coal mines in the Commonwealth of Kentucky.
2. The Kentucky Department of Mines and Minerals is designated by Kentucky Revised Statutes, Section 351.020(2), as the agency charged with administering all laws of the Commonwealth of Kentucky relating to mines, including coal mines.
3. The Commissioner of the Department of Mines and Minerals is designated by Kentucky Revised Statutes, Section 351.020(1), as head of the Kentucky Department of Mines and Minerals.
4. Kentucky Revised Statutes, Section 351.070(5) directs the Commissioner of the Kentucky Department of Mines and Minerals to collect statistics relating to coal mining in Kentucky and to make an annual report of such statistics.

5. The Kentucky Revised Statutes contain, among others, the following requirements for coal owners, operators or lessees:

(a) Section 351.175 entitled *Provisions concerning license to operate mine*, states:

(1) Within 45 days after January 1, 1953, and of each year thereafter, the owner, operator, or lessee of each mine shall procure from the Department a license to operate such a mine, and such license shall not be transferrable. Any owner, operator, or lessee who assumes control of a mine, opens a mine or re-opens an abandoned mine during any calendar year shall procure such license before mining operations are begun.

.

(3) Requests for such license shall be made to the Department, and such requests shall be accompanied by a post office money order or cashier's check drawn in favor of the State Treasurer in the amount of fifteen dollars for each mine. When the annual report of the operator and the annual mine map, as required by KRS 351.170 and 352.450 are properly submitted, to the Department, the license shall be issued. The chief or his accredited agents shall have the authority to extend the time for the filing of the map.

(4) Any owner, operator or lessee operating a mine and who fails to obtain his license as required by this section shall be guilty of a misdemeanor and shall be fined not less than twenty-five nor more than two hundred dollars at the discretion of the court. Each day the mine is operated without a license constitutes a separate offense.

(b) Section 351.170 entitled *Reports of owner, lessee or superintendent*, states:

The owner, lessee or superintendent of each commercial coal mine shall give at the end of each month and at the end of each calendar year accurate

information, on blanks furnished by the chief, as to the number of accidents that have occurred, the number of persons employed, the tons of coal mined and any other related information that the chief requests.

(c) Section 351.990 entitled *Penalties*, states:

(4) Any coal operator who violates any of the provisions of KRS 351.170 shall be fined not less than twenty-five nor more than two hundred dollars.

6. Pursuant to the statutory provisions set forth in paragraph 5(b), the Business Manager of the Kentucky Department of Mines and Minerals, or others under his supervision, regularly sends to each commercial coal mine owner, operator or lessee in Kentucky an annual report form requesting, among other things, such statistical information as the Commissioner of the Department of Mines and Minerals is obligated by law to obtain, and any other related information that the Commissioner might request for purposes of compiling the data published annually in the Coal Section of the Annual Report of the Kentucky Department of Mines and Minerals.

7. Since 1957, the Kentucky Department of Mines and Minerals has used four different annual report forms in the solicitation of the information referred to in paragraph 5(b). While each report form contained a different variety of information requested, each did request information as to annual production statistics.

8. Since 1957, the Annual Report have also varied in that they have sometimes listed production statistics by individual mines, by county and by mining district, and in some cases, by county and mining district alone. In all years, a total production figure has been reported for the West Kentucky Coal Mining District, as defined annually in the Annual Reports.

9. The mechanics of compilation of the information contained in the Annual Reports of the Kentucky Department of Mines and Minerals is as follows. The annual report forms referred to in paragraph 5(b) are sent by the Kentucky Department of Mines and Minerals to the operators of commercial coal mines in the Com-

monwealth of Kentucky. The owner, lessee or superintendent of each such commercial coal mine who fills out the form then returns the annual report form to the Kentucky Department of Mines and Minerals. The information contained in these reports is then transcribed into work papers by clerical staff under the supervision of the Business Manager. The work papers are then transcribed into manuscript form, proofread, sent to the printer, returned in galleys, proofread, and sent back for final printing. At each stage of the compilation process, from the filling out of the annual report forms by operators to the final printing of the Annual Report, C. C. Smith would testify to the best of his knowledge that the compilation process is accurate subject to the possibility of normal clerical error inherent in such a process.

10. Mr. C. C. Smith cannot of his own knowledge testify to the accuracy, or inaccuracy, of the information required to be provided the Department on the annual report forms by the coal operators of the Commonwealth of Kentucky. In addition, neither Mr. C. C. Smith, nor other representatives of the Kentucky Department of Mines and Minerals are required by law, or make it their practice, to independently verify the accuracy, or inaccuracy, of the information provided the Department on the annual report forms by the coal operators of the Commonwealth of Kentucky.

11. Neither "tons mined" as used in Kentucky Revised Statutes, Section 351.170, nor "Total Annual Production" as used on the current annual report form are anywhere defined in the Laws Governing the Mining of Coal and Clay, Kentucky Revised Statutes, Chapters 351-352. C. C. Smith would testify that coal operators would interpret the above terms to request one of the following: (1) the total tonnage of coal removed from the ground, (2) the total tonnage of coal removed from the ground which coal is also ultimately processed, (3) the total tonnage of coal removed from the ground which coal is processed and remains after processing, or (4) the total tonnage of coal removed from the ground which coal is sold to consumers.

12. The terms "owner," "lessee," and "superintendent," the parties responsible for the giving of information requested by the annual report form under Section 351.170 of the Kentucky Revised Statutes, are nowhere defined in Laws Governing the Mining of Coal and Clay, Kentucky Revised Statutes, Chapters 351-352. This section permits any of these persons to be responsible for the filling out of the annual report form.

13. Although copies of the Annual Reports are distributed to those coal mine operators requesting such Reports, C. C. Smith cannot of his own knowledge testify to the nature and extent of the use, if any, which is, or might be made, of the Annual Reports by the coal operators of the Commonwealth of Kentucky.

14. The Annual Reports as published by the Kentucky Department of Mines and Minerals show the following tonnages reported by underground, strip, or augur methods, as tons mined, by commercial companies within the West Kentucky District:

<u>Year</u>	<u>Total</u>
1957	30,365,081
1958	28,277,469
1959	30,337,072
1960	30,403,749
1961	30,609,229
1962	31,660,499
1963	35,718,613
1964	33,031,910
1965	39,878,940
1966	41,982,473
1967	45,613,806

The West Kentucky Mining District, as annually defined in the Annual Reports, consists of the following counties: Breckenridge, Butler, Caldwell, Carlisle, Christian, Crittendon, Davies, Edmonson, Graves, Grayson,

Hancock, Henderson, Hopkins, McLean, Muhlenberg, Ohio, Union, and Webster.

If no coal is mined in one or more of the aforesaid counties in a particular year, no tonnage figures are reported from companies in such counties. In such instances the Annual Report omits the names of such counties in listing the counties reporting tonnage from the West Kentucky Mining District.

15. The published figures set forth in paragraph 14 were compiled under the supervision of the Business Manager of the Kentucky Department of Mines and Minerals from information supplied it pursuant to the statutory provisions set forth in paragraph 5(b) by the owner, lessee, or superintendent of the commercial coal mines within those counties annually defined by the Annual Reports to comprise the West Kentucky Mining District, and in some instances where the annual report forms were either not returned or incomplete, upon production figures estimated by representatives of the Kentucky Department of Mines and Minerals.

Dated: December 4, 1968

/s/ Ruben L. Hedlund
RUBEN L. HEDLUND
Attorney for Defendants
Kirkland, Ellis, Hodson, Chaffetz & Masters
2400 Prudential Plaza
Chicago, Illinois 60601

/s/ John T. Cusack
JOHN T. CUSACK
Attorney, Department of Justice
Room 2634 United States Courthouse
Chicago, Illinois 60604
353-6975

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

Civil Action No. 67 C 1632-

Filed Jul 10, 1969

UNITED STATES OF AMERICA, PLAINTIFF

vs.

GENERAL DYNAMICS CORPORATION; THE UNITED ELECTRIC
COAL COMPANIES; and FREEMAN COAL MINING CORPO-
RATION, DEFENDANTS

STIPULATED TESTIMONY

J. R. Sinclair, Assistant to the General Counsel, The Dow Chemical Company, Midland, Michigan, if called in this case to testify, would testify as follows:

(a) The letters to T. J. Tarzy, dated October 24, 1966, and to John T. Cusack, dated May 9, 1968, attached hereto and identified as Dow Deposition Exhibits 1 and 2 respectively, were prepared by employees of the Dow Chemical Company and the information set forth therein is true and accurate.

(b) Paragraph 4 of the letter to John T. Cusack, dated July 2, 1968, attached hereto and identified as Dow Deposition Exhibit 3, was prepared by employees of the Dow Chemical Company and the information set forth in paragraph 4 is true and accurate.

(c) The purchase agreement #2729, dated March 18, 1966, attached hereto and identified as Dow Deposition Exhibit 4, is a true and accurate copy of a duly executed contract between The Dow Chemical Company and The United Electric Coal Companies.

Dated:

July 9, 1969

/s/ Donald G. Kempf, Jr.
Attorney for Defendants

/s/ Ronald R. Futterman
Attorney for Plaintiff

October 24, 1966

Mr. T. J. Tarzy

Vice President

The United Electric Coal Companies

307 N. Michigan Ave.

Chicago 1, Illinois

Dear Tom:

This will confirm the discussion during our visit with Mr. R. B. Hampson in Ludington, Michigan on October 14. Mr. Roy Parker, Power Superintendent, explained the difficulties that he had been experiencing during the summer in stockpiling United Electric's steam coal.

Primarily, his problem was one of extinguishing continual fires in his uncompacted storage piles, and this was aggravated by the sizing of the coal ($1\frac{1}{2} \times 0$), high moisture content, and high sulfur content. In firing the coal in his boilers, he had a hard time trying to hold loads on his units because of the surges of coal that would hit the boilers that had most of the volatile burned off, and he was trying to hold the boilers on line with char.

The sizing of the last cargo of coal in early October which was $1\frac{1}{4} \times \frac{1}{4}$ looked better, but Dick said that in making this double screened size it slowed down the preparation plant and they would rather not ship it. It was agreed that on the remaining two cargoes, one cargo would be cancelled, and the other cargo would be $1\frac{1}{2} \times 0$ coal to be shipped the last part of October for early November arrival. This will wind up the 1966 lake season and the last year of the existing ten-year contract between our companies.

Mr. Roy Parker also stated that with the projected loads he would need to carry on his old units, Dow management has agreed that a higher grade BTU coal should be considered until such time that a new unit can be installed which would utilize a lower grade coal.

Referring to contract agreement No. 108 dated August 29, 1956 as amended August 10, 1961, this will serve as our notice of intention to terminate the contract as of the shipment of Cargo 109, the last cargo of the 1966 lake season.

Sincerely yours,

/s/ Robert F. Bassinger
ROBERT F. BASINGER
Corporate Purchasing

fns

cc: J. Corey, Ludington
R. Parker, Ludington
G. Walter, Ludington
Contract file
file

DOW DEP. EX. 2

[DOW Emblem] THE DOW CHEMICAL COMPANY

May 9, 1968

General Office Building
2030 Abbott Road Center
Midland, Michigan 40640

John T. Cusack, Esq.
Midwest Office, Antitrust Division
Department of Justice
Room 2634 United States Courthouse
Chicago, Illinois

Re: United States v. General Dynamics
Corporation, et al., Civil Action
No. 67 C 1632 (N.D. Ill.)

Dear Mr. Cusack:

As promised in my letter of April 24, 1968, the following is the data requested by your letter of April 15, 1968:

1. List below in 2. you will find the entire fuel purchases for The Dow Chemical Company (Ludington, Michigan) plant for the years 1964 through 1967. Consumption has been broken down into areas of power plant and lime kiln production. Total tonnage for both power plant and lime kiln production was consumed in pulverized fuel boilers.

The alternative fuel for the power plant was number 6 fuel oil used strictly on a stand by basis and only in case of an unscheduled pulverizer outage at the power plant. The annual use for the years 1964 through 1967 of fuel oil was approximately 800,000 gallons per year. The price was \$.08 per gallon, F.O.B. Ludington and the purchases were from Naph-Sol of Cleveland, Ohio. Natural gas was used as a stand by fuel at the lime kiln plant. However, the volume was negligible and nominal. This stand by fuel was purchased from Michigan Consolidated Gas Company at the price of \$.44 per 1,000 cubic feet.

2. The following is the summary table of the entire coal purchases for the Ludington plant for the years 1964 through 1967. A word of explanation as to the table:

a. The figures in the column "Dollar Value" under the power plant and lime kiln, are F.O.B. Ludington Michigan, figures (rail and transportation charges to Ludington included).

b. Under the column "Mine" Dow does not have a record of the actual mine from which certain purchases came, but only the name of the agent-supplier, in certain instances.

In these cases an asterisk has been placed before the name to indicate that it is an agent-supplier name rather than the mine name. All others are mine names. This mine name information can be obtained by contacting the supplier's agent, if you feel it is necessary.

Steam Coal (Power Plant)

<u>Year</u>	<u>Shipper</u>	<u>Mine</u>	<u>Tonnage</u>	<u>Dollar Value</u>
1964	United Electric	Banner	99,269.00	
		Buckheart	17,913.45	
			117,182.45	\$832,850.76
1965	United Electric	Banner	70,384.00	\$504,662.73
1966	United Electric	Banner	63,897.00	\$469,707.83
1967	Pickands Mather	*Baughman	91,899	\$781,056.52
		*Doverspike		
		*C. L. Amos		
		*Gem Coal		
			12,386.30	\$112,781.24
	Pittston	Compass		
	Clinchfield	Mars		

Lime Kiln Coal

<u>Year</u>	<u>Shipper</u>	<u>Mine</u>	<u>Tonnage</u>	<u>Dollar Value</u>
1964	Fuel Sales	Wise Coal	16,599.55	\$146,804.76
	Ind. Fuel Sales	Kelsa #2	16,333.45	\$143,739.26
		*Blk. Diamond		
	M&O Coal Co.	*J. M. Jackson	223.55	
		Knox Creek	12,315.90	
		Joan Mine	4,043.30	
			16,582.75	\$144,968.06
	Ohio Southern	*A. T. Massey	32,701.30	\$281,551.65

<u>Year</u>	<u>Shipper</u>	<u>Mine</u>	<u>Tonnage</u>	<u>Dollar Value</u>
1965	Fuel Sales	*Wise Coal	25,142.80	\$219,965.09
	Grundy Fuel	*Wellmore	25,944.00	\$221,510.42
	Ind. Fuel Sales	D.J.B. Mine	4,672.30	
		Wolfpen	1,235.25	
		Levisa River	1,993.85	
		Blk. Diamond	18,563.85	
			26,465.25	\$233,301.62
	M&O Coal	Booth Coal	1,941.35	
		Fox Mine	287.25	
		Piedmont	267.60	
		Conley	4,923.30	
		Rich Creek	1,217.70	
	M&O Coal	*Ind. Fuel Sales	156.60	
		Knox Creek	12,736.70	
		*Logan & Kanawha	53.70	
		*A. T. Massey	1,424.95	
		Peerless Eagle	1,541.00	
		Joan Mine	1,351.80	
			25,901.95	\$218,336.99
	Ohio Southern	*Black Star	26,291.70	\$225,422.99
		*A. T. Massey		
		*Neeley & Gibson		
1966	Black Star Carbon Fuel	Henry Clay	14,407.50	\$129,427.64
		Blue Crystal #9	9,299.25	\$ 89,248.36
	Gem Coal Co.	Nampa Mine	4,441.65	
		Old Gauley	4,584.00	
		Conley Mine	3,765.05	
		Hull Mine	2,740.35	
			15,531.05	\$140,893.09
	Grundy Fuel	Wellmore	17,654.70	
		Home Creek	3,042.95	
		Southwestern, Va.	60.30	
			20,757.95	\$193,614.33
	Pickands Mather	*Berwind Fuel	24,542.05	\$228,082.30
		*A. T. Massey		
		*Pittston		
		Clinchfield		
		Bull Creek		

<u>Year</u>	<u>Shipper</u>	<u>Mine</u>	<u>Tonnage</u>	<u>Dollar Value</u>
1967	Carbon Fuel	#9 Blue Crystal	11,733.95	\$116,983.08
	Gem Coal	Terry Eagle	6,059.80	
		Conley Mine	1,630.55	
		Ottawa	139.80	
		Esco	1,185.25	
		Old Gauley	1,335.30	
		Card Mine	2,118.15	
		D.J.B. Mine	2,451.15	
			15,920.80	\$140,893.09
	Grundy	*Booth Coal	22,386.80	\$211,725.12
	Pickands Mather	*Lester Coal Pikeville	14,630.25	\$141,997.15

I have been informed that Dow has no studies or estimates as to the feasibility of immediate conversion from coal to another energy source.

If further explanation is needed on any of the above, we will be happy to comply upon request.

Sincerely yours,

/s/ Walter D. Bradley
WALTER D. BRADLEY
Attorney

DOW DEP. EX. 3

[DOW Emblem] THE DOW CHEMICAL COMPANY

July 2, 1968

General Office Building
2030 Abbott Road Center
Midland, Michigan 40640

John T. Cusack, Esq.
Midwest Office, Antitrust Division
Department of Justice
Room 2334 United States Courthouse
Chicago, Illinois 60604

Re: United States v. General Dynamics Corporation, et
al., Civil Action No. 67 C 1632 (N.D. Illinois)

Dear Mr. Cusack:

. . . .

4. Our discontinuance of coal purchases from The United Electric Coal Companies was a result of an up-grad-ing of coal specifications at our Ludington, Michigan, location. Attached is a letter dated October 24, 1966, from Mr. R. F. Basinger to Mr. T. J. Tarzy of The United Electric Coal Companies setting out our rea-sons for the discontinuance.

Very truly yours,

/s/ J. R. Sinclair
J. R. SINCLAIR
Assistant to the General Counsel

DOW DEP. EX. 4

THE DOW CHEMICAL COMPANY

Purchase Agreement No. 2729

Date March 18, 1966

Period 1966 Lake Season

The Dow Chemical Company agrees to buy and seller agrees to sell the following material(s) under the terms and conditions herein specified.

Seller: The United Electric Coal Companies
307 North Michigan Avenue
Chicago 1, Illinois

Attention: Mr. Thomas J. Tarzy

Using Locations: Ludington—Steam Coal

Material, Quantity and Specifications: 70,000 Net Tons (approx.) of washed $1\frac{1}{2}$ in. x 0 in. coal, with a 25 percent maximum $\frac{1}{4}$ in. x 0 in. carbon from sellers No. 2 Seam Banner Mine at Banner, Illinois. To be delivered during the 1966 lake shipping season via all water route and to be delivered uniformly over the shipping season.

Price and Package: Price to be \$0.3012 per M BTU all on an "as received" basis; F.O.B. our docks at Ludington, Michigan, as sampled and analyzed by Commercial Testing and Engineering Company at lake transfer point in South Chicago.

Shipping Point and Freight:

Payment Terms: Net 20th Prox.

Shipping and Billing Instructions: Lake barge F.O.B. our docks.

This agreement does not authorize delivery or payment for any material. Individual purchase orders or purchase orders with releases will be issued by the using locations for specific quantities and delivery dates. Invoices should

be sent in accordance with instructions on the purchase orders.

General Terms: This agreement is subject to the General Terms and Conditions set forth on the reverse of this sheet.

Special Conditions: Shipments of coal to be via standard barge to a South Chicago lake-front dock and there transferred to a lake barge equipped with unloading facilities of your selection, for delivery to Ludington, Michigan. Notify G. W. Walter by wire or phone, date of each shipment from South Chicago at least 7 days prior to each shipment.

Accepted:

/s/ Thomas J. Tarzy
Authorized Signature
Vice Pres.
Title

THE DOW CHEMICAL COMPANY

/s/ Robert F. Basinger
Authorized Signature
ROBERT F. BASINGER
Title
Fuel Buyer
Corporate Purchasing

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

Civil Action No. 67 C 1632

UNITED STATES OF AMERICA, PLAINTIFF

v.

GENERAL DYNAMICS CORPORATION; THE UNITED ELECTRIC
COAL COMPANIES; and FREEMAN COAL MINING CORPO-
RATION, DEFENDANTS

STIPULATION

Mr. George H. Shipley, President, The Carter Oil Company, Houston, Texas, if called to testify in this case, would testify as follows:

(a)* Prior to becoming president of The Carter Oil Company, he was general manager of the Coal and Shale Oil Department of Humble Oil and Refining Company.

(b) Carter Oil Company is a wholly owned subsidiary of Humble Oil and Refining Company, the principal operating subsidiary in the United States of Standard Oil Company (New Jersey).

(c) He has had an active part in the overall responsibility of acquiring Humble's coal reserves and in managing Humble's entry into the business of mining and sale of coal.

(d) By the end of 1968, Humble had invested approximately \$20,000,000 in acquiring coal reserves in Wyoming, Colorado, Montana, North Dakota and Illinois, and Humble and Carter have been spending approximately \$11,000,000 annually on activity relating to coal. Of this amount, approximately one-half pertains to activities related to Illinois coal reserves.

(e) Humble's acquisition of coal reserves was prompted by its long range need for supplemental sources of hydrocarbon raw materials, and Humble would not have been interested in acquiring coal reserves solely for the

purpose of becoming a supplier of coal to utility and industrial markets. However, Humble intends to be a long-term supplier of coal to Illinois utilities and perhaps others.

(f) Humble and Carter have acquired, directly or through trustees, coal rights in several hundred thousand acres in Illinois. The first acquisition of coal reserves in Illinois was made in November of 1965, and the bulk of the Illinois reserves were acquired during 1966.

(g) Monterey Coal Company, a subsidiary of Carter Oil Company, began construction of a coal mine in 1969 near Carlinville, Illinois, in Macoupin County. This mine will be an underground mine, having a slope for removal of coal and a shaft for ingress and egress of personnel. The total cost of this mine will be between \$10 and \$20 million, which does not include the cost of acquiring coal reserves. This mine presently has coal reserves to support a producing rate of approximately 3,000,000 tons of coal per year for between 20 to 30 years. In 1969 Carter entered into a long-term contract to supply, beginning in late 1970, coal to Commonwealth Edison Company. By the early or middle 1970's, approximately 3,000,000 tons of coal per year will be supplied to the power generating units of Commonwealth. Coal will be delivered to Commonwealth at the mine. This contract was assigned by Carter to the Monterey Coal Company. Monterey may have other customers for coal from this mine. In the acquisition of the Illinois coal reserves, Humble used information from many sources, including, among others, the Illinois State Geological Survey, and used such information in drilling for coal.

(h) Humble's decision to acquire coal reserves was made in 1965. The decision to operate a coal mine was made in 1968.

(i) None of the coal reserves acquired in Illinois by Humble or Carter are suitable for strip mining. Humble was looking for coal reserves in blocks of a minimum of approximately 100,000,000 tons each for future development of hydrocarbon raw materials. Upon investigation, Humble concluded that strippable coal reserves were not available in blocks of a minimum of approximately 100,-

000,000 tons. To justify opening a new mine Humble requires enough coal reserves to profitably support a mine life of between 20 to 30 years for underground mining. Coal reserves of the mine near Carlinville are at a depth of approximately 300 feet or more. Other reserves acquired in Illinois range in depth from 300 to 1,000 feet.

(j) Humble has no prior coal mining experience. Monterey is hiring competent coal executives and personnel to staff its coal mining operations. The new Illinois mine will employ more than 300 people.

Dated: July 10, 1969

/s/ Donald G. Kempf, Jr.
Attorney for Defendants

/s/ John T. Cusack
Attorney for Plaintiff

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

Civil Action No. 67 C 1632

UNITED STATES OF AMERICA, PLAINTIFF

v.

GENERAL DYNAMICS CORPORATION ET AL., DEFENDANTS

STIPULATED TESTIMONY OF GEORGE B. KNECHT

George B. Knecht, Purchasing Agent of the Standard Lime and Refractories Company, division of Martin Marietta Corporation, Baltimore, Maryland, if called in this case to testify, will testify as follows:

(a) Standard Lime and Refractories Company operates a facility in McCook, Illinois, which manufactures two products at the present time, dead burned dolomite and dolomitic lime. Dead burned dolomite is used by steel makers as a lining material for open hearth furnaces. Dolomitic lime is used as a fluxing agent in the steel making processes during the conversion of iron ore to slag.

(b) The McCook plant operation should be considered part of the metallurgical industry since both of the plant products are used by the steel industry.

(c) The steel industry requires that both dead burned dolomite and dolomitic lime meet a specific sulfur content.

(d) Coal with a sulfur content of greater than 2.3% cannot be used by Standard Lime and Refractories Company at its McCook, Illinois facility at the present time. Based upon conversations with coal producers and the

information contained in the Keystone Coal Buyers Manual, it was determined that The United Electric Coal Companies did not at the present time have sufficient low sulfur coal (less than 2.3%) to meet the McCook facility requirements and has never been contacted to supply this facility with coal.

(e) The letters addressed to him from the Capitol Fuel Company (dated September 22, 1966), Old Ben Coal Corporation (dated September 23, 1966), Peabody Coal Company (dated September 27, 1966), Sahara Coal Company, Inc. (dated November 18, 1966), Blue Diamond Coal Company (dated February 9, 1967), Freeman Coal Mining Corporation (dated March 1, 1967), Bell & Zoller Coal Company (dated March 14, 1967), and Pittston Clinchfield Coal Sales Corporation (not dated), all of which are attached hereto and identified as Knecht Deposition Exhibits 1 through 8, respectively, were received by him in the ordinary course of business in response to inquiries directed to the authors of said letters regarding the possible sale of coal to Standard Lime and Refractories Company.

(f) The schedule entitled "COAL PURCHASES", attached hereto and identified as Knecht Deposition Exhibit 9, was prepared by him during the ordinary course of business and the information set forth therein is true and accurate.

(g) The document marked Knecht Deposition Exhibit 10 is a true and accurate copy of a contract entered into between Freeman Coal Mining Corporation and Standard Lime and Refractories Company on March 1, 1967.

(h) There are many lime products produced by the same basic process as used in the McCook plant that need not adhere to a specific sulfur content.

(i) He is of the opinion that ownership by General Dynamics of both The United Electric Coal Companies and Freeman Coal Mining Corporation has had no adverse effect on Standard Lime and Refractories Company.

(j) Since he came with Standard Lime in 1946 oil or gas has never been as economical as coal to fuel the

McCook plant kilns and therefore neither fuel has been used for the purposes for which coal is used at this plant.

Dated: September 3, 1969

/s/ Donald G. Kempf, Jr.
DONALD G. KEMPF
Kirkland, Ellis, Hodson, Chaffetz & Masters
Prudential Plaza
Chicago, Illinois 60601
Attorney for Defendants

/s/ John T. Cusack
JOHN T. CUSACK
Attorney, Department of Justice
Room 2634 United States Courthouse
Chicago, Illinois 60604
353-6975

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KNECHT DEP. EX. 1

THE CAPITOL FUEL COMPANY

[SEAL]

Telephone
621-8200

LEADER BUILDING

CLEVELAND, OHIO 44114

September 22, 1966

Standard Lime & Refractories
Mr. George B. Knecht, Purchasing Agent
2000 First National Bank Building
Baltimore, Maryland

Dear Mr. Knecht:

We are very pleased to learn that you plan to start lime production at your McCook, Illinois plant in January, 1967.

We are very much interested in supplying the 25,000 tons of Alma seam coal you expect to consume during 1967. We shall keep in touch with you and make a written offer about November 1st.

We have checked a freight rate of \$5.11 per net ton to McCook, Illinois.

With kindest regards.

Very truly yours,

THE CAPITOL FUEL COMPANY

/s/
President

KNECHT DEP. EX. 2

OLD BEN COAL CORPORATION

[SEAL]

10 South Riverside Plaza, Chicago, Illinois 60608,
DEARBURN 2-2360

September 23, 1966

Mr. George B. Knecht, Purchasing Agent
Standard Lime and Refractories Company
2000 First National Bank Building
Baltimore, Maryland 21208

Dear George:

I was most pleased to receive yours of September 19 indicating some interest in our 1½" industrial screenings on which we quoted you earlier in the month.

Now, in line with your request for larger sized coal in the winter months for easier handling, we are pleased to quote you the following:

3 x 1 size	—	\$5.25
1½ x 10 mesh	—	4.85

You can expect the quality in the above two sizes to be equivalent to that quoted you on industrial screenings. As indicated to you in Baltimore, the reason for the price differential is that in the large midwestern mines, which are geared to volume loading, it is quite costly to screen coal and also the resulting sizes must be disposed of.

Hoping this is the information that you desired and looking forward to the opportunity of serving you, I remain.

Yours very truly,

/s/ William P. Darst
WILLIAM P. DARST
Assistant Vice President, Sales

WPD:re

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KNECHT DEP. EX. 3

PEABODY COAL COMPANY

332 South Michigan Avenue

Chicago, Illinois 60604

Area Code 312

Telephone 427-6450

September 27, 1966

Mr. G. B. Knecht
Purchasing Agent
Standard Lime & Refractories Co.
Baltimore, Maryland 21233

Dear Mr. Knecht:

In reply to your recent inquiry, none of our Midwestern coals can meet the 1% sulfur and 4.55 ash limitations designated by you.

In the Indiana fields our Old Glory Brazil Block seam coal on an as-received basis averages about 15% moisture, 6½% ash, and 1.4 sulphur. Chieftain #7 seam about 15% moisture, 8.29 ash, and 1.2 sulfur. These coals originate on the NYC and Milwaukee Railroads and move on a \$2.41 rate for 2,500-ton volume shipments, \$2.93 in 1,000-ton increments, and \$3.43 in single carlots.

Our Northern Illinois Mine near Braidwood in Kankakee and Will Countys has a centrifuged and heat-dried carbon averaging 15% moisture, 6.6 ash, and 2.3 sulphur. Freight rate \$1.57 for 2,500 tons, \$2.09 for 1,000 tons, and \$2.59 for single cars.

Our good Utility Southern Illinois screenings average 8% moisture, 8.3 ash, and 2.4 sulphur. All of these coals will meet the 36% to 40% volatile limitation.

Perhaps you can arrange trial shipments for each or all of the above coals and get actual operating data at your

857

McCook, Illinois plant. Mine prices for the various coals can be arranged for at that time.

Your further consideration shall be appreciated.

Yours very truly,

/s/ L. B. Girard
L. B. GIRARD
Vice President-Sales

LBG:ek

[SEAL]

KNECHT DEP. EX. 4

SAHARA COAL COMPANY, Inc.

59 East Van Buren Street
Chicago • 60605

HARRY EGGERT

Sales Manager

STEWART BYRNE

Asst. Sales Manager

Domestic Sales

HOWARD HERDER

Asst. Sales Manager

Industrial Sales

November 18, 1966

Mr. G. B. Knecht

Standard Lime & Refractories Co.

2000 First National Bank Building

Baltimore 3, Maryland

Dear Mr. Knecht:

Re: McCook, Illinois Plant

We wrote you on September 22 with preliminary information on our No. 5 Seam Saline County, Southern Illinois coal. We also told you we had a sample in the laboratory for ultimate analysis. We are attaching Commercial Testing & Engineering Company's report No. CH-342018 which is a proximate and ultimate analysis.

After you have studied this analysis and if it meets your requirements we will be glad to give you further information and also submit our F.O.B. mine price. We would also be glad to call at your McCook plant for a further discussion if you think it desirable.

Yours very truly,

/s/ **Howard Herder**
HOWARD HERDER
Assistant Sales Manager
Industrial Sales

HH:jw

KNECHT DEP. EX. 5

BLUE DIAMOND COAL COMPANY

P. O. Box 10050

Knoxville, Tennessee 37919

Area Code 615 — Phone 500-0511

[SEAL]

REX L. ROUSH
Industrial Sales Mgr.

February 9, 1967

Mr. George B. Knecht, Purchasing Agent
Standard Lime and Refractories Company
1900 First National Bank Building
Light and Redwood Streets
Baltimore, Maryland 21202

Re: *McCook, Illinois Plant*

Dear Mr. Knecht:

Have your plans at this plant progressed to the extent that you now know whether or not you will be needing a quality coal such as Leatherwood Washed and dried Nut and Slack? If so, we would have available for prompt shipment a sizeable tonnage that could be earmarked for you, to assure you of continuity of supply for many months to come.

It would be a pleasure hearing from you. The price structure here would be the same as at the Woodville, Ohio plant and that is \$5.00 for 25% fines, and \$4.85 for 35%.

Sincerely yours,

/s/ **Rex Roush**
Industrial Sales Manager

RLR:jc

CC: Mr. Olin Knott, Pyro Engineer

KNECHT DEP. EX. 6

[SEAL]

FREEMAN COAL MINING CORPORATION
A Division of General Dynamics Corporation

March 1, 1967

Mr. G. B. Knecht, Purchasing Agent
Standard Lime & Refractories
2000 First National Bank Bldg.
Baltimore, Maryland 21208

Dear Mr. Knecht:

Thank you for your recent telephone call suggesting we furnish some specific thoughts on a formal contract protecting the coal requirements of your McCook, Illinois plant. In this connection, we would like to make the following proposal.

For either a three or five year contract, we offer Orient No. 5 Mine $1\frac{1}{2}$ " x 10 Mesh Washed Screenings at \$4.60 per net ton mines, and for any months you may specify Orient No. 5 Mine 3" x 1" Washed Nut at \$4.85 per net ton mines. This is the coal presently being supplied. It appears to be well suited for your present purpose because of its strength which must be reflected in added production economy. Sulphur in this coal is higher than Orient No. 3, but still reasonable. Specifics on this coal were outlined in Mr. B. R. Gebhart's letter dated September 22, 1966.

In the event the McCook Plant converts to metallurgical type lime production and sulphur in the coal becomes a factor, the proposed contract would offer Orient No. 3 coal on an and/or basis. This would provide you with a coal in the range of 1.1% sulphur. Price on this coal will be the same as quoted on No. 5 Mine coal. All prices are subject to applicable taxes and wage and hour provisions as outlined in our standard form contract. I am attaching contract forms filled in as proposed in my letter with the exception of duration. This you may complete or we will if all else meets with your approval.

I feel sure you are aware of the present day coal market through your procurement activities in other plants. With this in mind, I strongly recommend the protection a contract can give, not only price but supply. Thank you again for your interest in this matter as well as for all the past tonnage we have shipped your McCook Plant. It is our sincere hope that our fine relationship will continue for many years.

Yours very truly,

/s/ G. A. Roberts
G. A. ROBERTS
Sales Manager

GAR:sw

KNECHT DEP. EX. 7

[SEAL]

BELL & ZOLLER
COAL COMPANY

200 South La Salle St., Chicago, Ill. 60604, Central 6-4222

March 14, 1967

Mr. George B. Knecht, Purchasing Agent
Standard Lime & Refractories Division
of Martin-Marietta Corporation
2000 National Bank Building
Baltimore, Maryland 21208

Dear M. Knecht:

Attached is our data sheet covering a quotation of 15,000 tons of ZEIGLER Superwashed 1½" x 23 Mesh Heat Dried Screenings with the sulphur requirement of the McCook Plant. We have revised the price quoted in June 1966, from \$4.45 per net ton, f.o.b. mine to \$4.60 per net ton, f.o.b. mine, which reflects the market change during this period.

Thank you very much for your interest.

Yours truly,

/s/ S. M. Rogers
S. M. ROGERS
Vice President

SMRogers/ga

Enclosure

Date: March 14, 1967

ZEIGLER

Shipper: Bell & Zoller Coal Company
203 South LaSalle Street
Chicago, Illinois 60604

Shipping Point: Zeigler Mine, Illinois

Originating Railroad: IC-MOP-C&BI-CB&Q

Name of Mine: Zeigler #4

Location: Zeigler Mine, Williamson
County, Illinois

Type of Mine: Slope

Mine Capacity: 6,000 tons per day

Seam: No. 6

Amount of tonnage offered: Maximum of 15,000 tons

Size of Coal: Superwashed 1" or 1½" x 28
Mesh Heat Dried Screenings

Price per net ton, f.o.b. mine: \$4.60

Present published freight rate: \$3.80—Single car rate.
\$3.30—Volume car rate—minimum
of 1,000 ton

<u>ANALYSIS:</u>	<u>As Received</u>	<u>Dry</u>	<u>SCREEN ANALYSIS</u>	
			(1" x 28 Mesh)	
Moisture	8.70		1" x ½"	37%
Volatile	33.45	36.64	½" x ¼"	38
Carbon	51.55	56.45	¼" x 28 M	25
Ash	6.30	6.90		
Total	100.00	100.00	Total	100%
Sulphur	1.20	1.30		
B.t.u.	12,350	13,527		
Ash Fusion		2350°		
Grindability		63		

The above offer is subject to the same conditions as those stipulated in our contract, especially the one with respect to the wage agreement. It is also subject to any applicable federal, state or local taxes.

KNECHT DEP. EX. 8

[SEAL]

PITTSTON CLINCHFIELD COAL SALES CORP.

17 Battery Place, New York, N.Y. 10004

Telephone (212) 944-4200

S. R. PURSGLOVE
Vice PresidentMr. George B. Knecht
Standard Lime & Refractories Co.
2000 First National Bank Bldg.
Baltimore, Maryland 21203

Dear M. Knecht:

Enclosed are mine data sheets for our Kentland and Spruce Fork Mines. The Kentland-Elkhorn Coal Corp. is now a wholly owned subsidiary of our company. The Kentland Mine produces a washed coal and Spruce Fork Mine a raw coal.

As I mentioned to you on the telephone, the Kentland Mine is now almost 100% involved in the metallurgical market and is priced accordingly. Low vein mining, a large proportion of high ash Bone production and high washing costs make this a high cost operation and necessitated our putting the coal in the higher priced metallurgical market for the mine to operate at all.

Your operating people might be interested in the possibility of using the raw coal from the Spruce Fork Mine. Spruce Fork meets your specifications except for the ash and volatile matter.

In any event we offer all this coal, subject to prior sale, for your use in the amount of 25,000 tons for the calendar year beginning January 1, 1967, at the following prices, f.o.b. mine:

	Per Net Ton
Kentland Mine: Washed Coal 1 1/4" x 1/4"	\$6.25
Washed Coal 1 1/4" N/S	\$6.25
Spruce Fork Mine: Cr. M/R	\$4.40

The freight rate from both mines to your plant at McCook, Illinois is \$5.11 per net ton on a single car basis and \$4.82 per net ton when shipped in 2,000 ton quantities.

On the telephone you mentioned an interest in Illinois coal. We combine with a low sulphur coal mined by Old Ben Coal Corp., 10 South Riverside Plaza, Chicago, Illinois, on some metallurgical business.

This coal has characteristics very similar to those given in your specifications. I mention this in the event you have any interest because of the lower freight rates.

Thank you for your inquiry.

Yours truly,

/s/ ~~S. R. Puraglove~~
S. R. PURSGLOVE
Vice President

enc.

KNECHT DEP. EL. 9

COAL PURCHASES

1963	55,960 tons
1964	67,045 "
1965	59,690 "
1966	51,854 "
1967—Orient #3	25,463.55
Orient #5	21,812.99
1968—Orient #3	23,492.15 (from 1/2/68 to 6/1/68)

Object to: Obtain a dependable source of low sulphur coal (around 1% sulphur) of a sizing 3" x 1" during winter season, 4 to 5 winter months and 1½" x 10 mesh during summer months.

Estimate 25,000 ton requirement of low sulphur annually.

<u>Freeman Coal Mining Corp.</u>	<u>Frt.</u>	<u>F.O.B. McCook</u>
<u>Orient #5 mine—1½" x 10 mesh</u>	\$4.60 N.T. + \$3.30x	\$ 7.9
F.O.B. mine		
3" x 1" washed nut	4.85 N.T. + 3.30x	8.15
F.O.B. mine		
<u>Orient #3 mine—1½" x 10 mesh</u>	4.60 N.T. + 3.30x	7.90
F.O.B. mine		
(low sulphur) 3" x 1" washed nut	4.85 N.T. + 3.30x	8.15
x Freight rate 1000 ton trainloads		
See attached letter of March 1, 1967		

Old Ben Corporation

<u>Illinois #6 Seam—1½" x 10 mesh</u>	4.85 N.T. + 3.30	8.15
3" x 1" size	5.25 N.T. + 3.30	8.55
Price both low sulphur and over same—per phone		
Mr. Darst on 3/13/67		
See attached letter of September 23, 1966		

Bell & Zoller Coal Co.

1½" x 28 mesh	4.60 N.T. + 3.30	7.90
F.O.B. mine		
Cannot furnish 3" x 1" size		
Also sold out for year—per phone 3/14/68		
Attached is letter of March 14, 1967.		

Sahara Coal Co.Fr.F.O.B.
McCook

Sulphur range too high for lime production.
No tonnage available.

Peabody Coal Co.

No low sulphur coals available.
Other coals—moisture content too high.

Pittston Clinchfield Coal SalesKentland

1½" x 1/4

6.25 N.T. + \$4.82 \$11.07

Spruce Fork

4.40 N.T. + 4.82 9.22

Blue Diamond Coal Co.Leatherwood

5.00 N.T. + 4.82 9.82

The Capitol Fuel Co.Alma

4.85 N.T. + 4.82 9.67

Consolidation Coal Co.

Sold out—possibly later

6.00/N.T.
Fr. RateGeneral Coal Co.

None available.

Youghiogheny & Ohio Coal Co.

1½" x 10 mesh—not available.

Berwind White Coal Co.

Nothing available.

File 24 72

300 WEST WASHINGTON STREET

CHICAGO 6, ILLINOIS

AGREEMENT, entered into this 1st day of March, 1967, between
 FREEMAN COAL MINING CORPORATION, a Division of General Dynamics Corporation, of Chicago, Illinois,
 (hereinafter referred to as "Seller"), and Standard LIME & REFRACTORIES
 of Baltimore, Maryland

(hereinafter referred to as "Buyer").

The Seller hereby agrees to sell and deliver, and the Buyer agrees to purchase and accept, coal of the kind and quality, at the price and on the terms and conditions as hereinafter set forth:

QUANTITY
AND GRADE
OF COAL:

Approximately 50,000 tons per year
 Origin No. 3 Mine and/or Orient No. 5 Mine 3" x 1" Washed Nut
 and/or 1 1/2" x 10" Washed Screenings.

RATE OF
SHIPMENT:

To be made in approximately equal monthly quantities, commencing April 1, 1967
 and ending March 31, 1972

PRICE:

\$4.85 - 3" x 1" Nut
 \$4.60 - 1 1/2" x 10" Nut

TRANSPOR-
TATION AND
EQUIPMENT:

The Seller will load the coal into open top railroad cars at such Mines, if such cars are there for that purpose, and consign to Standard LIME & REFRACTORIES, McCook, Illinois.

TERMS OF
PAYMENT:
STIPULA-
TIONS:

but the Seller shall be under no obligation to supply railroad cars, and readiness by it to deliver said Coal at such Mines shall constitute performance of this contract by it.

Cash or Chicago Exchange by the tenth of the month following the month of shipment.

(a) All deliveries are subject to delays caused by strikes, lockouts or other labor troubles, accidents, or unavoidable interruptions in operation of mines from which coal is to be shipped, or other causes beyond control of Seller. In the event of any of the above contingencies or if at any time for any cause total mine output falls below sum total of deliveries called for by all of its contracts, Seller may postpone deliveries in fair proportion among all contracts and orders previously accepted. If delivery for any month, or part thereof, is postponed or reduced by any contingency mentioned above, Seller shall be wholly released from all liability for the unpaid portion of such month's delivery, and, at Seller's election, such unpaid portion may be delivered during the succeeding month or the total amount of coal herein contracted for may be reduced by the amount of such unpaid portion.

(b) In case of strikes, fires, accidents, or for any other cause or reason beyond the control of the Buyer, which wholly or in any material part stop the operations of the Buyer, shipments contracted for shall be suspended or partially suspended, as in Seller's sole judgment and discretion the case may require upon written or telegraphic notice to Seller within twenty-four hours after such occurrence of the exact nature, extent and probable duration thereof; any and all coal theretofore loaded in cars consigned to Buyer or in transit upon receipt by Seller of such notice will be taken and paid for by Buyer, as well as any coal delivered by Seller to Buyer prior to receipt by Seller of such notice.

(c) Such interruption of deliveries, as mentioned herein, shall not invalidate the remainder of this contract, but on the removal of the cause of the interruption delivery shall be continued at the specified rate; PROVIDED that deficiencies caused by the interruption shall not be made up by the Seller unless Seller so elects.

(d) The purchase price of the coal specified herein is based upon the present cost of mining and of labor at such mines, and the price herein shall advance or decline correspondingly with any increase or decrease in the present cost of labor or other costs of production of the coal shipped hereunder.

(e) In the event that any State, Municipal or Federal excise, stamp, severance, sales, or other tax, assessment, license fee or other charge shall be levied, assessed, or charged on or for the mining, severance, production, removal, preparation, sale, transportation of same, or use, shipment, assignment or buying of said coal, or on the instruments or documents evidencing the same, or on the proceeds thereof, or on the Seller or account of the mining, severance, production, removal, preparation, sale, shipment or assignment of said coal, or in the event Seller shall contribute to any established or to be established welfare fund, hospitalization program, pension plan, or like or similar expenditure, whether imposed by operation of law or by management and labor agreement, or otherwise, then in any such event the price hereinafter mentioned shall increase to an amount sufficient to cover said tax, assessment, license fee, contribution or other charge.

(f) If Buyer fails to make any payment as it becomes due hereunder, or fails to accept coal as specified herein, or if Buyer breaches any of the terms or conditions of this agreement, Seller may, at its option, without notice, suspend further deliveries hereunder and cancel this agreement without being liable for any claims or damages whatsoever, or Seller, may at its option treat this contract for any or all undelivered coal as orders by Buyer, who shall be liable for all damages incident thereto, without any further tender, delivery, or act by Seller, failure to exercise any such option in any instance shall not be considered as a waiver of such option in regard to subsequent defaults. If in the judgment of the Seller the financial responsibility of the Buyer shall at any time become impaired and written notice be given by the Seller to the Buyer, the Seller shall have the right to suspend further shipments until adequate security for payment hereunder is furnished by Buyer.

(g) The Buyer will pay all freight and other transportation charges, together with any transportation tax thereon, on said coal, unless otherwise expressly stated herein, and the railroad scale weights at the usual point of weighing are to be accepted as correct and are to govern the settlement in the case of all coal delivered. A certificate of the scale master shall be conclusive evidence of the weight of coal delivered to the Buyer.

(h) There are no understandings or agreements relative to this contract or its subject-matter not fully expressed herein, and no agent or salesman has any authority to obligate the Seller by any terms, stipulations or conditions not herein expressed. There may be no modification of this agreement, except in writing, signed by the parties hereto.

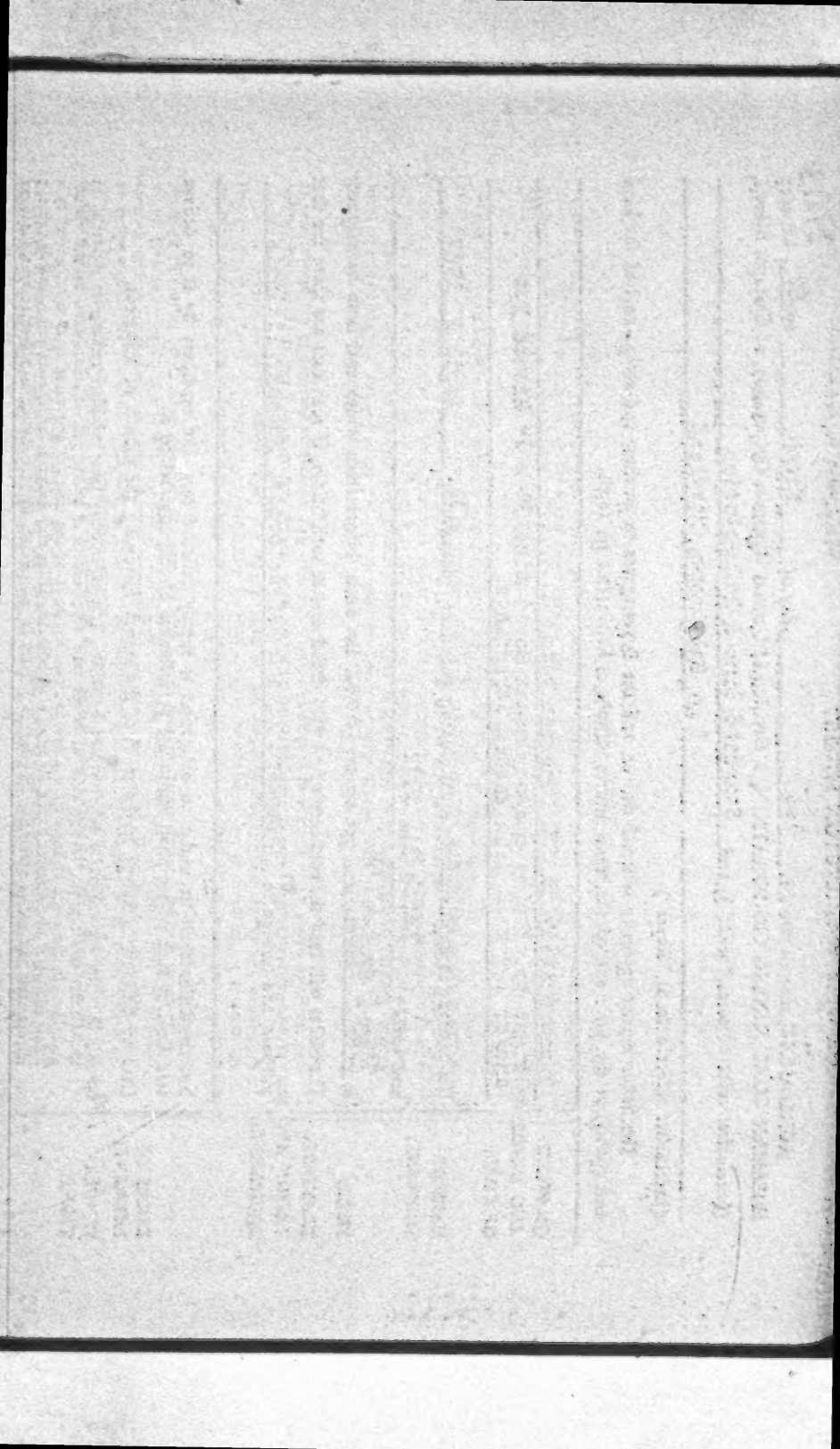
(i) This agreement shall be construed in accordance with and governed by the laws of the State of Illinois. Should any part, term, or provision of this agreement be invalid under the laws of any state, judicial authority thereat, or jurisdiction where used, the validity of the remaining parts, terms or provisions shall not be affected thereby.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed in duplicate by their respective officers duly authorized the day and year first above written.

Buyer: STANDARD LIME & REFRACTORIES

Seller: FREEMAN COAL MINING CORPORATION
 DIVISION OF GENERAL DYNAMICS CORPORATION

By: W. J. H. H. H.



UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

Civil Action No. 67 C 1632

[Received Sep. 18, 1969, Elbert A. Wagner, Jr. Clerk,
United States District Court]

UNITED STATES OF AMERICA, PLAINTIFF

v.

GENERAL DYNAMICS CORPORATION, ET AL., DEFENDANTS

STIPULATED TESTIMONY

David G. Hemminger, Attorney, The Proctor and Gamble Company, Cincinnati, Ohio, if called in this case to testify, would testify as follows:

(a) Prior to 1969, the St. Louis, Missouri manufacturing facility of the Proctor and Gamble Company consumed approximately 15,000 tons of coal per year to produce electrical power and heating.

(b) The St. Louis facility has been converted from coal burning to gas burning as a result of the St. Louis air pollution ordinance restricting the sulfur content of coal burned to less than 1%. The St. Louis facility had been burning coal with a sulfur content of 5%.

(c) The company continues to burn coal at its Chicago, Illinois facility.

Dated: September 17, 1969

/s/ Donald G. Kempf
KIRKLAND, ELLIS, HODSON,
CHAFFETZ & MASTERS
Prudential Plaza
Chicago, Illinois 60601
Attorney for defendants

/s/ John T. Cusack
JOHN T. CUSACK
Attorney, Department of
Justice
Room 2634 U.S. Courthouse
353-6975

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

Civil Action No. 67 C 1632

[Received Sep. 18, 1969, Elbert A. Wagner, Jr. Clerk,
United States District Court]

UNITED STATES OF AMERICA, PLAINTIFF

v.

GENERAL DYNAMICS CORPORATION ET AL., DEFENDANTS

STIPULATED TESTIMONY

John Sant, Attorney, McDonnell Douglas Corporation, St. Louis, Missouri, if called in this case to testify, will testify as follows:

(a) The St. Louis, Missouri based facility of McDonnell Douglas Corporation converted its power and heating system from coal to gas in 1967.

(b) The principal reason for this conversion was the adoption of state and local air pollution regulations which, among other provisions, required coal consumers in the city of St. Louis to use only low sulphur coal (less than 1.0%) and also required extensive filtration to reduce particulate emission.

(c) McDonnell Douglas Corporation concluded that gas was economically preferable to coal due to the high cost of low sulphur coal and the additional expense involved in installing and maintaining filtering equipment for particulate removal.

(d) During the time that coal was burned at the St. Louis facility, a gas heating and power system was maintained and always was available for emergency use.

(e) In the years ending June 30, 1966 and June 30, 1967, the St. Louis facility consumed 19,000 and 11,000 tons of coal, respectively.

(f) All of the consumed coal at the St. Louis facility from July 1, 1965 to June 30, 1967 was purchased from coal producers located in Franklin County, Illinois.

Dated: September 17, 1969

/s/ Donald G. Kempf
KIRKLAND, ELLIS, HODSON,
CHAFFETZ & MASTERS
Prudential Plaza
Chicago, Illinois 60601
Attorney for defendants

/s/ John T. Cusack
JOHN T. CUSACK
Attorney, Department of
Justice
Room 2634 U.S. Courthouse
353-6975

EXCERPTS FROM TRANSCRIPT OF PROCEEDINGS
BEFORE HON. EDWIN A. ROBSON, UNITED
STATES DISTRICT JUDGE FOR THE NORTHERN
DISTRICT OF ILLINOIS, EASTERN DIVISION,
ON OCTOBER 3, 1969

[10] THE COURT: All right. Go ahead, Mr. Sarbaugh.

MR. SARBAUGH: What we are after, as much as the designation of assets, is who is going to buy it and what is he going to do with it, and until we see what someone who is expert in the coal industry tells us what he will do with whatever the assets are, whether they be merely Industry and Round Prairie or more, we cannot make that kind of decision because we have a responsibility not to consent to something that is not going to restore competition. That is the purpose of the case.

Now, as to the Zeigler matter, I do want to say that I have some sympathy with the defendants on the Zeigler matter. It was a borderline company in terms of one that we approved, and I approved it, but I knew when we did it that it was a borderline company, but you have to find acceptable purchasers in these divestiture cases, and we have had some very bad luck in finding them.

Here is a company that has only three [11] million in production a year, with General Dynamics having thirteen million and with Peabody having twenty-three million, and it is a little company, it has no General Dynamics or Kennecott behind it, it has lost money, it is interested in staying in the coal business, so as a possible better alternative than the one of having either General Dynamics or Kennecott owning one of these matters, we thought a company that ranked seventh in Illinois and ninth or tenth in the Eastern Interior Coal Province was better than the status quo.

Now, as to reserves, I am aware that Zeigler has a few hundred million tons of claimed reserves. I am also aware that they have been able to pick these up in 1966 to 1968 at the same time that United Electric was not able to pick up reserves.

MR. CHAFFETZ: Underground?

MR. HEDLUND: All deep reserves.

MR. SARBAUGH: It is all deep reserves. When I referred to three million in connection with Zeigler, I was referring to three million tons of production in Illinois.

MR. HEDLUND: Your Honor, I would like to reply, if I may, to what Mr. Sarbaugh has just brought up, and [12] I think this might be helpful.

THE COURT: Go right ahead.

MR. HEDLUND: Zeigler has a total production of 3,900,000 tons, of which about 3,000,000 tons is in Illinois, as Mr. Sarbaugh says.

The combination of Zeigler and Midland would have 10,000,000 tons in comparison to UEC-Freeman's 1967 production of 13,000,000 tons.

However, in Zeigler's case, they have closed two mines in the past three years, not because these mines ran out of coal, but because of operating problems or because of a non-profit situation.

The point here is that this 10,000,000 ton production is an elusive thing. It could easily go up to 14,000,000 or 15,000,000. Their resource base is substantially larger than that of Freeman-UEC. Zeigler-Midland is 678,000,000 tons of coal and UEC-Freeman is 605,000,000 tons. That includes the Industry and Round Prairie Field that we included in our offer.

Midland is a strip only, United Electric is a strip only. Zeigler is a deep only, Freeman is a deep only. It is a natural partnership.

We can well understand how you could approve [13] that, because I do not think a Midland-Zeigler combination affects competition for the very same reasons that a United Electric-Freeman merger does not affect competition. The comparison is startling, and it was with that in mind that we had concern about our initial offer.

We fail to see, really, how you can maintain one position in one case, and in a simultaneous proceeding do exactly the opposite.

Now, the essential thing is that Midland-Zeigler, when combined, would be the second largest coal producer in Illinois and the second largest coal producer in the Midwest. That is what Freeman-UEC presently is. So what

is your objective? You do not like this second largest producer, so you are going to replace it with something else?

Now, in addition, about Zeigler being a marginal company, Zeigler has made money every year for the past eleven years. Quoting from their last annual report, it says in part, "We can only say that the whole organization is determined to make 1969 a banner year."

Their last six month report says, or rather, for the first six months of 1969, "Other income amounted [14] to \$171,000 compared to"—no, that is not it. I meant to refer to the last paragraph, which says:

"Operating results of the Zeigler No. 4 mine improved appreciably during the second quarter. Indications are the improved operating conditions at this mine, as well as at all other properties, will continue in the months ahead and satisfactory earnings for the balance of 1969 are anticipated."

I think the Court can understand the questions that our client can ask, namely, "They are trying to dismantle us at a very belated point in time, and at the same time they are approving another combination that would be the same."

. . . .

MR. EISEN: You can see why your offer to us was really not an offer at all, because you say, and we are inclined to agree with you, that as of today they are not commercially valuable, so this is what you are offering to sell.

. . . .

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

No. 67 C 1632

UNITED STATES OF AMERICA, PLAINTIFF

vs.

GENERAL DYNAMICS CORPORATION ET AL., DEFENDANTS

MOTION OF FRANK F. KOLBE TO BE EXCUSED
FROM TESTIMONY AT TRIAL

FRANK F. KOLBE, by his attorney, JOHN PAUL STEVENS, moves the Court for the entry of an order excusing him from testifying at the trial of the above cause. In support of said motion, KOLBE says:

1. In October 1968, KOLBE appeared voluntarily to testify in deposition proceedings in this cause. Because of his age and the then condition of his health, it was agreed between the parties that the deposition testimony would be limited to half-day sessions; that he testified during approximately four half-day sessions in response to questions propounded by the Government and that he testified during eight or nine half-day sessions in response to questions propounded by the defendants. The deposition transcript is approximately 1,000 pages long.

2. Subsequent to October, 1968, the condition of KOLBE's health has substantially deteriorated and he has been advised by his physician, Dr. Richard B. Capps, that his health might be further impaired to a serious extent if he were required to testify as a witness in open court for extended periods of time.

3. To the best of his recollection, he has no knowledge of any material facts relating to the above litigation which were not discussed fully during the course of his deposition, and he in good faith believes that additional testimony by him would be of no material benefit to the Court.

4. Shortly after the conclusion of his deposition he read over the transcript of his testimony and, except for the corrections which were forwarded to counsel for the Government, he is satisfied that the testimony then given was in accord with his best recollection.

5. In view of his age and infirmity, as set forth in the letter of Richard B. Capps, M.D., addressed to John Paul Stevens under date of March 2, 1970, which is attached hereto as Exhibit A, and in view of the fact that he has already testified at great length for the convenience of both parties, KOLBE respectfully submits that exceptional circumstances exist which make it desirable and appropriate, in the interest of justice, to permit him to be excused from giving further testimony in the cause.

6. Unless either party can make a compelling showing as to the necessity of his personal attendance at the trial, no valid reason exists for further imposing on a third party witness subject to the infirmities set forth in Exhibit A.

WHEREFORE, KOLBE respectfully prays that an appropriate order be entered by the Court excusing him from further testifying in this case.

/s/ John Paul Stevens
JOHN PAUL STEVENS
Attorney for
Frank F. Kolbe

ROTHSCHILD, STEVENS, BARRY & MYERS
105 South La Salle Street
Chicago, Illinois 60603
FR. 2-2345

Received a copy of the foregoing Notice and Motion of Frank F. Kolbe referred to therein before 4:00 o'clock P.M. this 3rd day of March, 1970.

JOHN THOMAS CUSACK
Attorney for Plaintiff

Received a copy of the foregoing Notice and Motion of Frank F. Kolbe referred to therein before 4:00 o'clock P.M. this 3rd day of March, 1970.

REUBEN L. HEDLUND
DONALD G. KEMPF
Attorneys for Defendants

By _____

EXHIBIT A.

Richard B. Capps, M.D.
Philip N. Jones, M.D.
Andrew Thomson, M.D.
Howard J. Rosenblate, M.D.
1725 West Harrison
Chicago, Illinois 60612
738-2966

March 2, 1970

Mr. John Paul Stevens
105 South LaSalle—Room 603
Chicago, Illinois

Dear Mr. Stevens:

At your request I am writing you in regard to Mr. Frank F. Kolbe who may be asked to testify as a witness in a case to be tried in the Federal Court. I am a practicing physician in the city of Chicago who is certified as a specialist in internal medicine and also the subspecialty of cardiovascular disease. Mr. Kolbe has been a patient of mine since 1954. He enjoyed reasonably good health considering his age until December of 1967 when he developed diabetes and bouts of auricular fibrillation, an irregularity of the heart beat. In the fall of 1968 he began to fail and in November of that year was found to have a cancer of the colon. This was operated and removed on the 23rd of November 1968.

In early February of 1969 he developed acute serum hepatitis as a result of transfusions received at surgery. This necessitated a chair and bed existence for a number of months followed by marked restriction of physical activity. The hepatitis persisted until October of 1969. In the meantime his auricular fibrillation is now present most of the time so that he has had to be digitalized and requires diuretics because of low grade congestive heart failure. During the last four or five months he has made considerable improvement but still tires very easily and requires much extra rest. He is now up and around and has even been able to attend a few short meetings and make a few short trips.

In view of the fact that Mr. Kolbe would have to be on the witness stand for a number of days if he did serve as a witness in this trial, I would strongly recommend that he be excused from serving because of medical reasons. I believe it is clear that it would put a great strain on him which would be highly undesirable.

Sincerely yours,

/s/ R. B. Capps
RICHARD B. CAPPS, M.D.

RBC:s

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

Civil Action No. 67 C 1632

[Filed Oct. 27, 1970]

UNITED STATES OF AMERICA, PLAINTIFF

v.

GENERAL DYNAMICS CORPORATION ET AL., DEFENDANTS

DEFENDANTS' PROPOSED FINDINGS OF FACT
AND CONCLUSIONS OF LAW

HAMMOND E. CHAFFETZ
REUBEN L. HEDLUND
DONALD G. KEMPF, JR.
RICHARD H. IRVING, III

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UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

Civil Action No. 67 C 1632

UNITED STATES OF AMERICA, PLAINTIFF

v.

GENERAL DYNAMICS CORPORATION ET AL., DEFENDANTS

FINDINGS OF FACT

I. JURISDICTION *

1. Defendant General Dynamics Corporation ("General Dynamics" or "GD") is a corporation organized and existing under the laws of the State of Delaware, with its headquarters located in New York, New York. *Admitted by plaintiff, DPTF 1.*

2. Defendant The United Electric Coal Companies ("United Electric," "United" or "UEC") is a corporation organized and existing under the laws of the State of Delaware, with its headquarters located in Chicago, Illinois. *Admitted by plaintiff, DPTF 2.*

3. Defendant Freeman Coal Mining Corporation ("Freeman") is a corporation organized and existing under the laws of the State of Illinois, with its headquarters located in Chicago, Illinois. *Admitted by plaintiff, DPTF 3.*

4. Defendants Freeman and UEC are wholly owned subsidiaries of defendant General Dynamics. *Admitted by plaintiff, DPTF 4.*

* The following abbreviations are used: DPTF for Defendants' Pre-Trial Findings; GPTF for Government Pre-Trial Findings; GF for Government's Proposed Findings; DX and GX to denote exhibits; Dep. and Tr. to denote deposition and trial transcript references.

5. Defendants General Dynamics, Freeman and UEC are engaged in commerce within the meaning of Section 7 of the Clayton Act, 15 U.S.C. § 18. *Admitted by plaintiff, DPTF 5.*

6. This action is filed under Section 15 of the Act of Congress of October 15, 1914 (15 U.S.C. § 25), as amended, commonly known as the Clayton Act, in order to prevent and restrain the alleged violation by the defendants of Section 7 of the Clayton Act (15 U.S.C. § 18). *Admitted by plaintiff, DPTF 6.*

7. Each of the defendants is found and transacts business within the Northern District of Illinois, Eastern Division. *Admitted by plaintiff, DPTF 7.*

8. This Court has jurisdiction of the subject matter of this action and of the parties thereto. *Admitted by plaintiff, DPTF 8.*

II. NATURE OF THE EVIDENCE

9. As is detailed in the findings below, the record in this case consists of more than 7,500 pages of trial transcript and deposition testimony,* and more than 800 trial and deposition exhibits, containing in excess of 10,000 pages.

Officers, Directors and Employees of Defendants

10. Frank Nugent, Group Vice-President of General Dynamics and President of both Freeman and UEC, was deposed by the Government and testified for defendants at trial. Mr. Nugent joined Freeman in the early 1920's and, with the exception of the period between January 1, 1968 and April 1, 1969, has been the company's president since the mid 1950's. Mr. Nugent also became chairman of UEC's Executive Committee in 1959, and, again with the exception of the period between January 1, 1968 and April 1, 1969, has served as president of UEC since 1966. *Nugent Dep. 3, 44; Nugent Tr. 1830.*

* All depositions, whether taken by plaintiff or defendants, have been received in evidence. *Tr. 144-44A, 2272.*

11. John M. Morris, presently serving UEC in a consulting capacity, was deposed by the Government and testified for defendants at trial. Mr. Morris joined UEC's sales staff in the 1920's. He became Sales Vice-President and a Director in 1954. Mr. Morris was made President of UEC in 1959 and served in that capacity until his retirement in 1966. *Morris Dep. 5-7; Morris Tr. 152, 153.*

12. Two former outside directors of UEC testified for defendants at trial. John D. Ames, a partner in the investment banking firm of Bacon, Whipple & Company, was placed on UEC's board in 1948 by Frank Kolbe, UEC's president, and remained a director until 1966 when UEC became a wholly owned subsidiary of General Dynamics. Reuben Thorsen, a limited partner and former chairman of the investment banking firm of Paine, Webber, Jackson & Curtis, was elected to UEC's board in 1959. At that time, one of his firm's clients, Incorporated Investors, a large Boston-based investment trust, held approximately 10 percent of UEC's stock. *Ames Tr. 1693-94; Kolbe Dep. 32; Thorsen Tr. 582-84.*

13. Thomas J. Tarzy, UEC's Vice President of Western Operations, was deposed by the Government. Mr. Tarzy joined UEC in 1952 as sales manager, and served as the company's Sales Vice President from 1959 until he assumed his present position in December of 1966. He also served as a director from 1964 through 1966. *Tarzy Dep. 3, 8-9, 23.*

14. Robert H. Inman, Vice President of Operations, Resources Group, General Dynamics, became a field engineer for UEC in 1948 and was the company's Vice President of Operations from December 1965 until April of 1968, when he left UEC to undertake his present responsibilities. Mr. Inman's deposition was taken by the Government. *Inman Dep. 5, 8, 11-12.*

15. Depositions were taken by the Government of two of General Dynamics corporate officers, John P. Maguire, Secretary, and Harold K. Pedersen, Treasurer. *Maguire Dep. 3; Pedersen Dep. 3.*

16. Thomas A. Latimer, UEC's Manager of Lands, has been engaged in securing coal lands for UEC since 1939. He was deposed by the Government and was called by

defendants at trial in order to establish a foundation for DX 60D. This is a chart entitled "United Electric Coal Companies, Possible Reserve Acquisitions at Existing Mines," the admissibility of which the Government agreed to upon the completion of its cross-examination of Mr. Latimer. *Latimer Dep.* 5-10; *Latimer Tr.* 1341-43.

17. Burl C. Jensen is a geologist employed by UEC since 1963. He was deposed by the Government. *Jensen Dep.* 5-6.

18. Frank F. Kolbe served as UEC's President and chief executive officer from 1939 until the fall of 1959. At that time, John Morris became President of UEC and the Board created the post of Chairman for Mr. Kolbe. UEC's Board of Directors was also realigned and Frank Nugent—President of Freeman—became chairman of UEC's Executive Committee. Within a few years Mr. Kolbe sold his UEC stock and resigned as Chairman and Director. Mr. Kolbe remained in reasonably good health until the fall of 1967. In the fall of 1968, he began to fail, and, shortly before he was operated on for cancer, his deposition was taken by the Government. While there had been considerable improvement in Mr. Kolbe's health in the months before trial, and the Government had indicated its intention to call him at trial, Mr. Kolbe's physician recommended that he not testify. Pursuant to agreements reached between the parties, Mr. Kolbe's request to be excused was granted by the Court. *Kolbe Dep.* 9-10; *GX 200*, pp. 4003-08; *Motion of Frank F. Kolbe To Be Excused From Testifying At Trial*, with attached Letter; *Defendants' Reply To Motion of Frank F. Kolbe To Be Excused From Testifying At Trial*.

Executives of Other Coal Producers

19. Testimony was taken from executives of seven other coal producers. Nicholas T. Camicia, President of The Pittston Company, one of the country's largest coal companies—with an annual production of 23 to 24 million tons, principally from deep mines—was called by defendants at trial to testify with respect to UEC's prospects for entry into deep mining. Before becoming president of Pittston in April of 1969, Mr. Camicia served as

president of both UEC and Freeman, during which time his deposition was taken by the Government. *Camicia Tr.* 1882-85.

20. Two other coal executives appeared at trial. Hollie Hopper, Vice President of Operations of the Ayrshire Coal Company Division of American Metal Climax, Inc., was called as a rebuttal witness by the government, and Samuel F. Sherwood, President of Calvert-Youngblood Coal Company, and President of Stonefort Coal Mining Company at the time it was acquired by Peabody Coal Company, testified on behalf of defendants. *Hopper Tr.* 1864-65; *Sherwood Tr.* 1448-49.

21. Before trial, defendants took the depositions of the chief executives of three smaller coal producers, Clarence V. Beck, President of Little Dog Coal Company; William D. Stiehl, President of Belle Valley Coal Company; and Leon King, President of Barbara Kay Coal Company. *Beck Dep.* 2; *Stiehl Dep.* 3; *King Dep.* 4.

22. By agreement of the parties, a stipulation was entered concerning the testimony of George H. Shipley, President of Carter Oil Company, a wholly owned subsidiary of Humble Oil and Refining Company, the principal domestic operating subsidiary of Standard Oil Company (New Jersey). The stipulation details Humble's coal reserve exploration and acquisition activities and its plans for the opening of a deep coal mine near Carlinville, Illinois. *Shipley Stip.* 1-5.

Consumer Executives

23. Testimony was taken by defendants from a representative cross-section of midwest energy consumers. These executives were from large, medium-sized and small utilities, a rural electric cooperative, federal electric authority, retail coal dealer, and industrial concerns, and came from every midwest state which the Government alleges to be of significance in this case. The utility executives represented companies which, taken together, consume more than 60 percent of all coal sold to utilities in the midwest. *DX 85, Table XXX.*

24. These consumer witnesses were responsible high-level executives with extensive experience in the pur-

chasing of their companies' energy requirements, and were able to give testimony concerning virtually every issue in the case.

25. At trial, defendants called Gordon R. Corey, Chairman, Finance Committee, *Commonwealth Edison Company*, Chicago, Illinois; E. C. Hill, Former Chief of Coal Procurement, *Tennessee Valley Authority*, Chattanooga, Tennessee; Victor H. Wood, Superintendent of Fuel Procurement, *Northern States Power Company*, Minneapolis, Minnesota; A. H. Davis, President, *Central Illinois Light Company*, Peoria, Illinois; Norman Moser, Chief Engineer, *Dairyland Power Cooperative*, LaCrosse, Wisconsin; Robert W. Steele, President, *Interstate Power Company*, Dubuque, Iowa; and Louis R. Tomey, Superintendent of Supply Service, *Union Electric Company*, St. Louis, Missouri. Corey Tr. 1580; Hill Tr. 1071; Wood Tr. 598; Davis Tr. 686; Moser Tr. 1508; Steele Tr. 930; Tomey Tr. 321.

26. Prior to trial, defendants deposed Bernard W. Schotters, President, *Indianapolis Power and Light Company*, Indianapolis, Indiana; Gordon J. Morrison, Superintendent of Steam Plants, *Wisconsin Public Service Company*, Green Bay, Wisconsin; LeRoy M. Abrahamson, Manager of Power Production, *Wisconsin Power and Light Company*, Madison, Wisconsin; Fred E. Nicosin, Vice-President of Power, *Public Service Company of Indiana*, Plainfield, Indiana; Thomas M. Ward, Vice-President, Secretary and Treasurer, *Ohio Valley Electric Corporation*, and its subsidiary *Indiana-Kentucky Electric Corporation*, Columbus, Ohio; Harry B. Gaunt, Purchasing Director, *Kentucky Utilities Company*; Reuben A. Redard, Vice-President, Purchases, *Keystone Steel and Wire Company*, Peoria, Illinois; and Hugh E. Petersen, President, *J. W. Petersen Coal and Oil Company*, Retail Coal Dealer, Chicago, Illinois. Schotters Dep. 4; Morrison Dep. 4; Abrahamson Dep. 4-5; Nicosin Dep. 6-8; Ward Dep. 4; Gaunt Dep. 3; Redard Dep. 5; Petersen Dep. 4.

27. Stipulations were entered with respect to the testimony of four consumer witnesses, George B. Knecht, Purchasing Agent, *Standard Lime and Refractories Com-*

pany, Baltimore, Maryland; J. R. Sinclair, Assistant to the General Counsel, *Dow Chemical Company*, Midland Michigan; John Sant, Attorney, *McDonnell-Douglas Corporation*, St. Louis, Missouri; and David G. Hemminger, Attorney, *Proctor and Gamble Company*, Cincinnati, Ohio. *Knecht Stip. 6; Sinclair Stip. 1; Sant Stip. 1; Hemminger Stip. 1.*

Nuclear, Gas and Oil Officials

28. At trial, Ernest B. Tremmel, Director of Industrial Participation of the *United States Atomic Energy Commission*, and George Gamble, an independent consultant working primarily with *Gulf General Atomic Company*, testified for defendants with respect to past, present and future developments in the use of nuclear energy for the generation of electricity. Mr. Gamble is a director of Union Electric Company in St. Louis, and was formerly the company's executive vice-president. He also testified with respect to certain other issues in the case. *Tremmel Tr. 770-74; Gamble Tr. 1232-35.*

29. Before trial, defendants deposed Harold S. Walker, Director of Public Affairs of the *American Gas Association*, and Winford C. Peterson, President of the *National Oil Fuel Institute*, with respect to the past, present, and likely future use of gas and oil as alternative fuels to coal. *Walker Dep. 3; Peterson Dep. 3.*

Executives From Amalgamated Industries

30. Two executives from Amalgamated Industries,* B. H. Sloane, Vice President, and Philip W. Dorrance, Division General Manager, were deposed by defendants with respect to the reserve acquisition efforts undertaken by UEC on behalf of Amalgamated. *Sloane Dep. 4; Dorrance Dep. 3.*

Government Officials and Other Executives

31. Jack A. Simon, Principal Geologist, *Illinois State Geological Survey* ("IGS"), testified at trial for both parties concerning Illinois strip coal reserves. Among

* In order to protect trade secrets, this pseudonym is used throughout.

other functions, the IGS compiles estimates on the quantity of coal to be found in the ground in Illinois. Mr. Simon was deposed in advance of trial by the Government. *Simon Dep. 3-4.*

Air Pollution Witnesses

32. William J. Stanley, Director of Air Pollution Control, *City of Chicago*; John S. Moore, Engineer, Bureau of Air Pollution, *State of Illinois*; and John T. Middleton, Commissioner, National Air Pollution Control Administration, *United States Department of Health Education and Welfare*, were deposed by defendants with respect to the air pollution regulations being formulated and enacted at the local, state, and national level and enforcement activities designed to assure compliance therewith. *Stanley Dep. 3; Moor Dep. 3; Middleton Dep. 2.*

33. Thomas L. Craig, Manager of Pollution Control, *Wellman-Lord Company*; Robert H. Quig, Engineer, Utility Operations, *Chemical Construction Corporation*; and Daric N. Miller, Manager of Electrical Production, *Kansas Power and Light Company*, were called at trial as rebuttal witnesses by the Government to testify concerning equipment for controlling sulphur oxides emitted during the burning of coal. *Craig Tr. 2035; Quig Tr. 2173-74; Miller Tr. 1723.*

Other Witnesses

34. Richard Drollinger, Director of Engineering of *Harnischfeger Corporation*, testified at trial for defendants with respect to strip mining technology and equipment. *Drollinger Tr. 1151-57.*

35. Defendants deposed three *Government Services Administration* employees who work in the United States Courthouse and Federal Building in which this suit was tried. Aldo P. Brazzale, Supervising Mechanical Engineer, testified with respect to the impact of air pollution regulations on fuel consumption and the decision to convert the boilers in the Courthouse from coal to a combination of gas and oil. John P. Nix, Building Management Officer, and Josephine C. Burton, Fuel Procurement Agent, testified with respect to the Government's practice of purchasing only coals whose characteristics meet specifications set by the Government in light of the design re-

quirements of its boilers. *Brassale Dep. 4; Nix Dep. 5; Burton Dep. 4.*

Statistical Foundation

36. In order to lay a foundation for admission into evidence of certain statistical information, the Government deposed Joseph C. Tabor, Chief Clerk, Illinois Department of Mines and Minerals; Joseph J. Gallagher, Supervising Industry Economist, Bureau of Mines, United States Department of the Interior; Charles W. Stadell, Executive Vice-President, Midwest Coal Producers Institute, Inc.; Martha Terleke, Corporate Secretary and Assistant Treasurer, Midwest Coal Producers Institute, Inc.; William Kurtz, Manager, Division of Economic Coal Statistics, National Coal Association. In addition, the testimony of C. C. Smith, Business Manager, Kentucky Department of Mines and Minerals, was stipulated to by the parties. *Tabor Dep. 3; Gallagher Dep. 3; Stadell Dep. 4-5; Terleke Dep. 4-5; and Kurtz Dep. 3-5; Smith Stip. 1.*

Expert Witnesses and Reports

37. *John E. Organ* is a geologist whose principal occupation since 1932 has been the exploration or acquisition for others of coal lands and mining rights. He holds a Master's Degree in Geology from George Washington University. He has been responsible for the development of numerous midwest strip coal fields and has made on-site investigations in virtually every coal producing county in Illinois, Indiana and West Kentucky. Mr. Organ prepared a Report (DX 88) concerning the availability of economically mineable strip reserves in the midwest. Mr. Organ's qualifications and Report were cross-examined through deposition by the Government in advance of trial. *Organ Dep. 3-4;*

38. *Paul Weir Company* has served for thirty-one years as mining engineers and geology consultants for the Federal Government, coal producers, railroads, electric utilities, mineral ore firms and financial institutions. They were acknowledged by one of the Government's own witnesses to be one of the most widely known and highly regarded mining engineering companies in the world.

A Report (DX 87) was prepared by Paul Weir Company on the availability of economically mineable strip reserves in the midwest. The Report discusses in detail the strip mining potential of UEC's Industry Field and other fields investigated by UEC in the past and contended by the Government to be economically mineable. Finally, the Report analyzes UEC's ability as an independent operating company to engage in deep mining. Prior to trial, John P. Weir, Executive Vice President of Paul Weir Company, was deposed by the Government, and cross-examined with respect to the above mentioned Report. *Weir Dep. 3; Weir Dep. Ex. 19; Hopper Tr. 1894.*

39. S. Smith Griswold, President of Seversky Environmental Dynamics Research Associates (SEDRA) prepared a Report entitled "Impact of Sulphur Oxide Regulations On Midwest Coal Markets" (DX 89). The Report discusses the regulatory patterns of air pollution control in midwestern states and cities, their impact upon coal consumption, and the developmental status of emission control technology.

Mr. Griswold was one of the nation's first air pollution control officials. From 1954 through 1965, he was the Chief Air Pollution Control Officer for Los Angeles County. During that time, his department established the first air monitoring system and conducted basic research on the cause and abatement of air pollution. Significantly, his Department operated on a budget in the 1950's that was greater than that being spent by all other pollution control offices in the country combined, including that of the Federal Government.

Mr. Griswold served as Assistant Director of the National Air Pollution Control Administration (NAPCA) from the time of the inception of the federal air pollution control program in 1965 until 1968, when Mr. Griswold and a number of NAPCA staff members left Government service to form SEDRA. He was responsible for all matters of enforcement while with NAPCA, and also supervised the original study of sulphur oxide levels conducted by the Federal Government.

Since that time, this firm has done research in the field of air pollution for federal, state and local agencies,

for electric utilities and for industrial firms. Mr. Griswold has frequently consulted with the Antitrust Division of the U.S. Department of Justice as a prospective witness in pending litigation—even after his retention by the defendants here.

At one time or another, Mr. Griswold has contacted and studied every air pollution control agency in the United States and has consulted on every item of federal air pollution legislation from the first congressional enactment on the subject to the present. He holds a Master's Degree in Government Administration from Stanford University.

Prior to trial, the Government deposed Mr. Griswold and cross-examined him concerning the above described Report. *Griswold Dep.* 3-11, 13-14, 21-22, 35-36, 211-13, 261.

40. *Dr. Bruce C. Netschert*, Director of the Washington Office, National Economic Research Associates, prepared a Report and accompanying statistical analysis entitled "Interfuel Competition and Changes in the Coal Industry Since World War II" (*DX 85*). Dr. Netschert holds a Bachelor's Degree in Geology and a Ph.D. Degree in Economics from Cornell University. He has served on Presidential Commissions relating to national policy for energy and mineral resources, and through his work with the Bureau of Mines, The Office of Defense Mobilization and the Central Intelligence Agency, Dr. Netschert has directed various programs concerned with the availability and use of energy.

Since 1961, as NERA Director, Dr. Netschert has undertaken extensive research on the national, regional and local supply and demand of energy resources. He has served as consultant for the Federal Power Commission and has testified before a variety of Congressional committees. Dr. Netschert is the author of five books and numerous articles on subjects relating to energy and power.

Dr. Netschert was deposed by the Government prior to trial and cross-examined about his Report and statistical analysis. *Netschert Dep.* 3-6, 7-8; *DX 85* and appended "Vita and Bibliography".

41. *Abraham Gerber*, Senior Consultant with National Economic Research Associates, prepared a Report entitled "Structure and Geography of the Electric Utility Market for Coal" (DX 86). Mr. Gerber has served as special assistant to President Philip Sporn of American Electric Power, the nation's largest investor-owned utility system and one of its largest coal consumers. In this capacity, he participated in fuel procurement and combustion decisions, and directed research on the development of nuclear energy and other fuel resources.

Mr. Gerber has held positions in the Presidential Cabinet Committee on Energy, the Subcommittee on Energy and Raw Materials Resources and the Office of Coal Research of the Department of the Interior. Gerber also served as technical advisor to both the FPC National Power Survey and the Interdepartmental Energy Study of the Federal Government.

Mr. Gerber has taught graduate seminars on nuclear power at M.I.T., and authored numerous articles dealing with electric utilities, boiler design, coal characteristics and the impact of air pollution upon energy economics.

Mr. Gerber was deposed by the Government prior to trial and Cross-examined on his Report. *Gerber Dep.* 3-6, 9; DX 86 and resume attached thereto.

42. Two expert economists gave testimony at trial. *Dr. Peter O. Steiner* was called by defendants. Dr. Steiner holds a joint appointment to the University of Michigan School of Law and the College of Literature, Science and the Arts, and teaches courses in economic theory, statistics and antitrust economics. He received his Bachelor's Degree from Oberlin College and both his Master's and Doctorate in Economics from Harvard University. He has done research for the U.S. Bureau of the Budget and for the Treasury Department. He also served on President Nixon's Task Force on Productivity and Competition. Dr. Steiner has written numerous articles, book reviews and book chapters. He is co-author of *Economics*, a basic economic textbook that is being used by over 140 colleges and universities.

Dr. Steiner spent over a year familiarizing himself with the record and documents and analyzing the data

in this case. In addition to his testimony at trial, Dr. Steiner's deposition was taken by the Government prior to trial. An expert Report (*Steiner Dep. Ex. 2*) prepared by Dr. Steiner, and cross-examined by the Government during his deposition, is in evidence. *Steiner Tr.* 2098-2101; *Steiner Dep.* 3-11, 20-24; *Steiner Dep. Exs.* 1, 2.

Mr. James Folsom, a staff economist at the Federal Trade Commission, appeared as a rebuttal witness on behalf of Plaintiff. Mr. Folsom received his Bachelor's Degree from the University of Georgia, and attended graduate school there and at Vanderbilt University. Since 1964, Mr. Folsom has been employed by the FTC's Division of Economic Evidence. He has contributed to one published article (as a co-author) and to one FTC Staff Report. Mr. Folsom began his work on this case about two months prior to the trial. *Folsom Tr.* 2451, 2453; *GX* 140.

43. In assessing the weight to be given the Reports and testimony of defendants' expert witnesses, it is significant that all of them, except John Organ, have been employed and relied upon by the Government itself in the recent past.

Documentary Evidence

44. Extensive documentary evidence was introduced by both the Government and defendants, including statistical compilations, letters received from third parties during the course of discovery, articles appearing in trade journals, newspapers, and other publications, documents from the files of both the Government and defendants, and reports compiled by various public and private commissions.

45. With the exception of documents ruled inadmissible by the Court upon motion at trial, all deposition exhibits were received in evidence. *Tr.* 145.

Data Supplied in Response to Questionnaires

46. Upon order of the Court, Subpoena Questionnaires in a form agreed to by the parties were directed to coal producers and consumers throughout the midwest. Information was requested with respect to a wide variety

of production and consumption practices. The results of these surveys constitute, in effect, a coal census with respect to such matters as coal characteristics, coal distribution patterns, coal reserves, interfuel competition, and characteristics and capabilities of strip and deep mines and coal companies in the midwest. The comprehensive nature of the Subpoena Questionnaire survey can be seen from the fact that information was received with respect to 76,581,000 of the 77,810,200 tons of coal which the Government alleges, on the basis of data prepared by the National Coal Association, to have been consumed by utilities in the midwest. *DX* 49A, 54; *GX* 61.

47. Prior to the issuance of the Court's Subpoena Questionnaire, the Government sent out questionnaires of its own design to midwest coal producers, seeking information with respect to their past acquisitions, and with respect to coal sales, by destination, for certain years.

48. Statistical summaries were prepared on the basis of information supplied in response to both the Government's questionnaire and that sent out under subpoena. The parties agreed that, while none of the underlying data received in response to any of the questionnaires was required to be introduced into evidence, all parties would be free to make reference to such data both at trial and subsequently. *Tr.* 951-52; *DX* 49A, 49-56, 58-59; *GX* 32-33, 52, 54-61, 74, 86-91.

III. BACKGROUND OF THE DEFENDANTS

A. GENERAL DYNAMICS CORPORATION

49. General Dynamics is a diversified corporation selling to government services and agencies, and industrial and commercial customers. Over 85 percent of General Dynamics' annual sales are to government services and agencies, principally of aircraft, space, communications, and marine products. General Dynamics' sales to industrial and commercial consumers include commercial communication equipment, building materials, coal, lime and machinery. *Admitted by plaintiff, DPTF* 9.

50. In 1959, General Dynamics acquired Material Service Corporation ("MSC") as part of its attempt to diversify into commercial, non-defense business. *Nugent Tr.* 1842; *Maguire Dep. Ex.* 1, p. 1. MSC was at that time a midwest producer and supplier of building materials, concrete, coal and limestone, and owned all of the stock of Freeman and 34 percent of UEC's outstanding stock. *Admitted by plaintiff, DPTF* 10.

51. At the time of the GD-MSC merger, General Dynamics was also seeking diversification through development of commercial products stemming from such programs as the company's Convair 880/990 jet transports; Canadair's commercial turbo-prop CL-44 and CL-540 aircraft; General Atomic's nuclear research maritime and power reactors; Liquid Carbonic's industrial gases; and Stromberg-Carlson's telephone and high fidelity sound equipment. *Maguire Dep. Ex.* 1, p. 1.

52. By the time of the trial of this action, however, these diversification ventures had been discontinued or sold, with the exception of Stromberg-Carlson's communication equipment business. *Nugent Tr.* 1842-45. In the early 1960's General Dynamics' Convair Division phased out its commercial jet transport production program. During 1967, GD sold General Atomic to Gulf Oil Corporation, and in 1969, as a result of an adverse decision in *United States v. General Dynamics Corp.*, 258 F.Supp. 36 (S.D.N.Y. 1966), it sold Liquid Carbonic to Houston Natural Gas Corporation, *GF* § IV, ¶ 1 at pp. 5-6.

53. General Dynamics is not presently engaged in any aspect of either the electric utility or fuel industries other than the production of coal. *GX* 138.

B. FREEMAN COAL MINING CORPORATION

54. Freeman began as a coal sales company headquartered in Chicago. It was acquired by the Burton Coal Co. in 1922, the same year it acquired its first mine, the Bobby Dick, located in Williamson County, Illinois. *Nugent Tr.* 1829; *Nugent Dep.* 4; *Nugent Dep. Ex.* 38.

55. Throughout its history, Freeman's mining operations have been centered in Illinois in Jefferson, Franklin

and Williamson Counties in the Southern Illinois Freight Rate District.* In addition, it has operated the Crown Mine in the Springfield Freight Rate District in central Illinois. *Nugent Dep.* 4-9; *Nugent Dep. Ex.* 38.

56. In 1942, MSC acquired Freeman and the assets of Burton Coal Co., both of which companies were in bankruptcy. *Nugent Dep.* 14.

57. On December 31, 1954, Empire Building Corporation which, like MCS, was controlled by the Henry Crown family, acquired the stock of the Chicago, Wilmington & Franklin Coal Company ("CW&F"). *Nugent Tr.* 1831-32; *DX* 48.

58. After the acquisition of CW&F stock by Empire Building Corporation, Freeman operated the mines of CW&F and sold the coal which they produced. From 1955 forward, CW&F and Freeman were, for all practical purposes, one coal company. *Nugent Tr.* 1832-33.

59. The name and the location of each mine of Freeman, the estimated coal reserves in tons dedicated to each mine, and the other coal reserves owned in fee, under lease or optioned by Freeman, all of which are located in Illinois, as of December 31, 1968, were as follows:

* Freight Rate Districts are discussed below in Findings 286-88.

DEDICATED TO EXISTING MINES OTHER COAL RESERVES

<u>Mine Location</u>	<u>Estimated Coal Reserves (Deep)</u>	<u>Counties in Illinois</u>	<u>Estimated Coal Reserves (Deep)</u>
Crown Mine—Located adjacent to Farmers- ville, Montgomery County, Illinois	20,719,552	Macoupin	55,456,800
		Christian	11,642,400
		Montgomery	141,034,992
Orient No. 3 Mine— Located near Walton- ville, Jefferson County, Illinois	33,532,320	Sangamon	11,760,000
		Williamson	16,498,272
Orient No. 4 Mine— Located near Marion, Williamson County, Illinois	5,315,408	Jefferson	97,961,664
Orient No. 5 Mine— Located near Walton- ville, Jefferson County, Illinois	55,730,400		
Total Tons Dedicated to Existing Mines	<u>149,333,280</u>		
Total Tons Other Reserves			<u>334,354,218</u>
Total Tons All Reserves			<u>483,887,408</u>

GPTF § IV, ¶ 12 at pp. 8-9.

60. The Orient mines of Freeman are located in the Southern Freight Rate District and the Crown Mine is located in the Springfield Freight Rate District. Nugent Dep. 109; *Nugent Dep. Ex. 38*.

61. Among 37 coal producers in the Midwest, Freeman ranks 8th in terms of coal reserves in Illinois, Indiana and West Kentucky, but controls less than 4% of the

total midwest reserves controlled by these companies in 1968. Of the 9 "leading" * Illinois coal producers that reported their coal reserves, Freeman ranks 6th in reserve holdings. Of the 11 "leading" producers in the three state area, Freeman ranks 7th in reserve holdings. DX 61; GX 72, 85.

62. Of the more than 2 billion tons of coal reserves dedicated to existing mines in Illinois, Indiana and West Kentucky as of 1968, Freeman controls 149,333,280 tons or 6.5 percent. DX 62.

63. While Freeman's reserves in central Illinois are of relatively low BTU value and have a sulphur content of over 3 percent, substantially all of the reserves and production at Freeman's Orient mines are high quality, high BTU coal with a sulphur content of less than 2.5 percent, and ranging as low as 1 percent. Approximately one-half of Freeman's other reserves in Williamson and Jefferson County have a sulphur content of less than 1.5 percent. *Nugent Tr. 1855-58; Freeman Subpoena Questionnaire Response, Forms 225.*

64. Approximately 8 percent of Freeman's production is sold for metallurgical purposes, and an additional 10 to 11 percent is dust.* *Nugent Tr. 1925, 1976.*

65. All of Freeman's mines are deep shaft operations, and, aside from its relationship with UEC, Freeman has never operated any strip mines and has no experience or expertise in strip mining. *Freeman Subpoena Questionnaire Response, Form 225; Camicia Dep. 52.*

66. None of Freeman's mines or coal reserves are located in a Freight Rate District in which UEC operates a mine or controls reserves. *Nugent Dep. Ex. 38; Weir Dep. Ex. 1; DX 60; UEC and Freeman Questionnaire Responses.*

* The Government, in its statistical exhibits, has designated certain midwest coal producers as "leading producers." See, e.g., GX 79, 85.

* Dust is defined and discussed below, at Findings 351-54.

C. THE UNITED ELECTRIC COAL COMPANIES

History and Mines

67. United Electric was formed in 1919 as a consolidation of several coal properties located in the vicinity of Danville, Illinois. *GF* § V, ¶ 1 at p. 11. By 1929, it had expanded its operations to include the Cuba and Freeburg mines in Illinois and the Farmersburg mine in Indiana. *GX* 14, pp. 4, 12.

68. In 1930, as part of the attempt to gain financing for the opening of the Fidelity mine at DuQuoin, Illinois, UEC proposed to acquire the properties of the Electric Shovel Coal Corporation, which had three strip mines in Indiana; the resulting combination would have been the largest stripping operation in the United States. *GX* 17, pp. 3-4. This failed to materialize,* however, and UEC was subsequently forced to enter into an agreement with its creditors which gave substantial management rights to a Creditors' Committee. UEC operated under this agreement until 1938, and for the following five years, bank loan agreements continued to restrict capital expenditures and dividends. Thus, it was not until 1943 that UEC was "entirely free in managing its own affairs." * *Kolbe Dep. Ex.* 17, 46, p. 6; *Kolbe Dep.* 522.

69. As of July 31, 1939, UEC operated four strip mines in Illinois—Fidelity, Freeburg, Cuba and Buckheart—producing a total of 2,078,696 tons. Its mines were centered in the Fulton-Peoria Freight Rate District and the Belleville Freight Rate District. *Kolbe Dep. Ex.* 42, p. 2.

* Electric Shovel subsequently became Ayrshire Collieries. *Organ Dep.* 132.

* UEC's president during this period, Mr. Kolbe, credited himself with having put UEC's financial house in order, and claimed to have secured a loan for UEC in 1941 at such low interest rates that a banker could only classify him as a "humdinger." The record, however, shows that, in order to secure its 1941 loan, UEC was forced to pay interest at twice the then prime interest rate. Compare *Kolbe Dep.* 13-15 with *Kolbe Dep. Ex.* 45, p. 6, n. 2 and *DX* 218.

70. By 1948, United Electric's production had increased to 3,700,264 tons from six mines, including the Solar Mine opened in 1945 in Schuyler County, Illinois and the Buffalo Creek Mine in Madisonville, Kentucky. Its coal reserves stood at 81,862,499 tons, and the company claimed to be the largest strip coal mining company in Illinois. *Kolbe Dep. Ex. 52, pp. 4-6.*

71. The Solar and Freeburg mines were closed in 1949. *Kolbe Dep. Ex. 53, p. 5.*

72. In 1952, UEC opened the Skyline mines in Eastern Kentucky. This was a contour stripping operation leased from Island Creek Coal Company, which also served as exclusive sales agent for the mine. *Kolbe Dep. Ex. 55, p. 5; Morris Tr. 260-261.* The mine never produced the amount of coal expected, and it was closed in 1955 as a "disastrous failure." *Kolbe Dep. 408; Kolbe Dep. Ex. 1, p. 4; Morris Tr. 263; Camicia Dep. 47.*

73. In 1955, UEC opened the Mary Moore mine, a stripping operation near Danville, Vermillion County, Illinois. *GF § V, ¶ 2(e) at p. 13.*

74. In 1959, the Buffalo Creek mine was closed because it was not worthwhile to bring in bigger equipment that could have handled the higher overburden * being encountered. Moving in large stripping equipment was considered particularly inadvisable in view of the uncertain future of the homeheating coal market which the mine served. *Kolbe Dep. 909; Kolbe Dep. Ex. 5, p. 7.*

75. The Mary Moore mine was closed in 1965 upon the exhaustion of strippable reserves. *GF § V, ¶ 2(e) at p. 13.*

76. UEC presently operates only 4 strip mines, all in Illinois. The Cuba mine located in Fulton County was opened in 1924; the Fidelity mine in Perry County in 1928; the Buckheart mine in Fulton County in 1937; and the Banner mine in Fulton and Peoria Counties in 1960. *Kolbe Dep. Ex. 43, p. 3; GF § V, ¶ 1 at pp. 11-12.*

77. The Cuba, Buckheart and Banner mines are in the Fulton-Peoria Freight Rate District; the Fidelity

* Overburden is the soil and other material which rests on top of the coal seam.

mine is in the Belleville Freight Rate District. *Nugent Dep. Ex. 38; Weir Dep. Ex. 1.*

78. UEC produces no dust and no metallurgical coal, and has no production or reserves with a sulphur content of less than 2.5%. *UEC Subpoena Questionnaire Response, Forms 225; Morris Tr. 480, 515; Petersen Dep. 10-11; Steiner Tr. 2257; Simon Tr. 37-38; GX 210, exhibits 13a and 17a.*

UEC's Coal Reserves

79. UEC's midwest coal reserves owned, optioned or leased, may be divided into four categories: (1) strip reserves dedicated to UEC's four existing mines (52,033,304 tons); (2) undeveloped strip reserves at the Industry Field in Illinois (12,550,457 tons); (3) undeveloped deep reserves in the Round Prairie Field (44,251,574 tons); and (4) miscellaneous strip and deep reserves in Illinois at various locations (9,202,158 tons).^{*} *DX 60A.*

*(A) Reserves Dedicated to Existing Mines.***

- (1) At the Cuba Mine, UEC has 1,206,260 tons remaining, with a possible, but doubtful, acquisition of an additional 300,000 tons. This mine will probably cease production in 1970. *DX 60D; Nugent Tr. 1860-1862; Davis Tr. 731.*
- (2) At the Buckheart Mine, 27,379,963 tons remain; there is the possibility of acquiring an additional 1,500,000 tons, although 500,000 tons is not presently available for purchase and the acquisition of the balance is extremely doubtful. These reserves, which include North Canton, have been sold to Central Illinois Light Company under a long term contract. *DX 35; DX 60D; Davis Tr. 702, 732.*

^{*} UEC also controls reserves in Oklahoma and Colorado. By agreement of the parties, these reserves are not relevant to the issues in the litigation. *See DX 60A, 47; Tr. 416.*

^{**} As is detailed in Findings 391-97, 423, these are UEC's only mineable reserves.

- (3) At the Banner Mine, there remain 5,081,691 tons and there is a possibility of acquiring an additional 100,000 tons. This mine will probably cease production within 5 years or so. *DX 60D; Tarry Dep. 120-21.*
- (4) At the Fidelity Mine, 18,365,390 tons remain, with the possible acquisition of something less than 1,790,000 tons. *DX 60D.*

(B) *Undeveloped Strip Reserves at The Industry Field.*

This field is located near the town of Industry, Illinois and lies across the McDonough-Schuyler county line. Initial acquisitions were made in this field prior to 1948. It consists of 12,550,457 tons of strip coal. *Inman Dep. 188; DX 60A.*

(C) *Undeveloped Deep Reserves at The Round Prairie Field.* This field is located in the Perry and Washington counties of the Belleville Freight Rate District in Illinois, and consists of 44,251,574 tons of deep coal. *Morris Tr. 172; DX 60A.*

(D) *Miscellaneous Illinois Strip and Deep Reserves Owned or Leased.* These reserves, totaling 9,202,158 tons, are in four locations: (1) 344,842 tons of strip coal in Fulton County near East Liverpool, controlled by the company since prior to July 31, 1958 as an "isolated" parcel; (2) 1,714,710 tons of strip coal in Perry County referred to as the "Gayle Field" and controlled by the company since prior to July 31, 1958; (3) 1,795,360 tons of deep coal in Vermillion County, Illinois at the site of the Mary Moore mine, closed in 1965; and (4) at the Fidelity mine, 5,347,246 tons of deep coal which UEC was required to purchase in order to obtain strip reserves from Union Collieries in 1958. *Morris Tr. 222; Morris Dep. 309-310; DX 60B, 60C.*

80. UEC has no reserves in the midwest other than those located in Illinois. *GF § VI, ¶ 11 at p. 17.*

81. Among 37 coal producers in the midwest, UEC ranks 11th in terms of coal reserves in Illinois, Indiana and Western Kentucky, but controls less than 1% of the total midwest reserves controlled by these companies in

1968. Of the 9 "leading" * Illinois producers that reported their reserves, UEC ranked 8th in reserve holdings. Of the 11 "leading" producers in the three state area, UEC ranked 10th in reserve holdings. *DX* 61; *GX* 72, 85.

82. Of the more than 2 billion tons of coal reserves dedicated to existing mines in Illinois, Indiana and West Kentucky in 1968, UEC controlled 52,033,804 tons or approximately 2½%. *DX* 60A, 62.

83. None of UEC's mines or coal reserves are located in a Freight Rate District in which Freeman operates a mine or controls reserves. *Nugent Dep. Ex. 38; Weir Dep. Ex. 1; DX* 60; *UEC and Freeman Subpoena Questionnaire Responses*.

UEC's Critical Reserve Position

84. Prior to 1955, UEC had examined more than 200 fields of coal reserves, but only 7 had been taken up in whole or in part; some of the best were dropped without investigation; UEC had not had a "real" land department, and its competitors had far better prospecting organizations. The company had not built properly for its future. *Kolbe Dep. Ex. Y, p. 3; Morris Tr. 183-186; Latimer Dep. 8, 405-419; Nugent Dep. 411*.

85. In its reserve program up to 1959, UEC committed "serious errors," lost heavily to competitors in Fulton County and lacked aggressiveness. *Kolbe Dep. Ex. N; DX* 13; *Inman Dep. 105*.

86. In 1955, UEC had a total of between 85 and 90 million tons of reserves. In comparison, Truax-Traer Coal Company that year had a total of approximately 314,000,000 tons of reserves. *Kolbe Dep. Ex. C, "Re-Cap" following p. II-4; GX* 23; *Kolbe Dep. Ex. D, "Re-Cap" following p. II-3*.

87. By 1960, Peabody Coal Company, Truax-Traer, Ayrshire Collieries, Southwestern and Midland Electric Coal Co. (all predominantly or exclusively strip mine companies), had reserves substantially greater than UEC.

* The Government, in its statistical exhibits, has designated certain midwest coal producers as "leading producers." *See, e.g., GX* 72, 85.

Kolbe Dep. Ex. O, p. 3; 79th Coal Report of Illinois 1960, Kolbe Dep. Ex. 26.

88. UEC's lack of reserves was well-known in the marketplace. The president of one midwest utility which had been purchasing coal from UEC for over a quarter of a century testified that "a number of years ago I reviewed with our operating people, our production people, the problem that we saw on the horizon, which was the diminishing reserves situation with United Electric." *Steele Tr. 942; see also Steele Tr. 997; Wood Tr. 608-10, 678-79; Davis Tr. 702, 756-57; Moser Tr. 1521; Abrahamson Dep. 52; Morris Dep. 32-33; DX 77.*

89. In the late 1950's, UEC began having trouble with its utility customers because of its reserve position. Some of its customers advised UEC that, in view of its lack of reserves, they could no longer consider UEC as a potential competitor for their business in the future. *Id.; see also Morris Tr. 190-91, 436-40; Morris Dep. 32-33, 55-62; DX 112, p. 8.* More than a year and a half before this action was filed, a contract extension proposed by UEC to one of its customers was returned unsigned with the observation that such an extension "would be meaningless in view of the limited Fulton County reserves that are controlled by your Company." *DX 26.*

90. Further recognition of UEC's reserve shortage prior to the filing of the Complaint may be seen in a note from Irving Crown to Frank Nugent in 1963 that UEC was reaching the end of the line on reserves, comments made at a Board of Directors Meeting of General Dynamics on September 30, 1966 to the effect that UEC had limited coal reserves and was having trouble in obtaining and keeping long-term contracts, and the statement in GD's "Invitation for Tenders" dated October 7, 1966 with respect to the limited life of UEC's existing strip mining reserves. *DX 23; Nugent Tr. 1849-50; DX 112; Nugent Dep. Ex. 35, p. 3.*

91. Frank Kolbe, UEC's former president, defended the company's coal reserve policy during his tenure on the basis that the Company had other uses for its money, and that, in any event, coal was a roller-coaster business in which many people went broke. *Kolbe Dep. 231-232.*

As he said, "You don't indulge in the expansion. It is quite a venture, this expansion of the coal industry." *Kolbe Dep.* 734-735. "We did not care to tie up money that would not be—for coal fields that might never be mined, and certainly would not be mined for a long time in the future." *Kolbe Dep.* 189, 300-302. However, even had UEC been stronger financially, Kolbe testified that he would have had the company develop heat transference systems to recover oil from shale and attempt open-pit mining of gold.* *Kolbe Dep.* 237-239.

92. Beginning in the fall of 1959 when John Morris became President of UEC and Frank Nugent became Chairman of its Executive Committee, and continuing to date, UEC made a vigorous effort to purchase additional strip coal reserves. *Ames Tr.* 1699; *Thorson Tr.* 591-92, 903; *Nugent Dep.* 412-15; *Nugent Tr.* 1940-1942; *Morris Tr.* 536; *Inman Dep.* 222; *Camicia Tr.* 1386, 1399, 1439-41; *Camicia Dep.* 161-164, 196-199; *Hopper Tr.* 1883, 1886; *DX* 113, p. 4080, 4086, 4138, 4196.

93. After control of UEC had been gained by Material Service/Freeman, in 1959, the fact that UEC should somehow obtain additional reserves was discussed by UEC Directors at regular intervals and it was made clear to UEC's management that all of the money necessary would be made available for the acquisition of reserves. *Nugent Dep.* 420, *DX* 113, pp. 4080, 4086, 4138, 4196. Mr. Camicia testified that, while he was president of UEC, he had a "blank check" from General Dynamics to acquire whatever strippable reserves UEC could possibly find. *Camicia Tr.* 1399. Similarly, Mr. Inman, who

* It was only upon prompting by Government counsel that Mr. Kolbe even mentioned coal reserves:

Q What about coal reserves?

A We would have acquired those coal reserves North of Canton, coal reserves over here in Vermillion County had they still been available, and also those in—we would have drilled much more extensively out in—

Q Industry?

A Industry, sure. The world, the sky's the limit. *Kolbe Dep.* 239.

had been UEC's Vice President of Operations, stated that he had an "open book" with respect to the expenditure of funds on the acquisition of coal reserves. *Inman Dep.* 205; *see also Morris Tr.* 536.

94. Subsequent to 1959, UEC's personnel were given extremely wide latitude in their search for additional strip reserves. They were not limited to the acquisition of reserves with a potential of immediate commercial development, but were instructed to acquire any reserves which might prove capable of being recovered profitably at any time in the foreseeable future. *Nugent Dep.* 421-22. As Mr. Camicia related at trial: "I didn't even put any reservations on it. I just said find some coal that could be stripped, and then I would decide whether it was worth buying or not. Anything that can be stripped, just so it is black." *Camicia Tr.* 1440.

95. Accordingly, UEC investigated many potential strip coal areas including the area south of the Industry field, the Augusta field, the Meredosia-Mount Sterling area, the Ripley-Mount Sterling area, the Meredosia area, the Spring Lake Township area, the Salt Fork field, the Sepo field, the Roodhouse field, the Belle Rive field, the Ottawa field and the Toulon field in Illinois; Gibson Clay, Fountain, Vermillion, Vigo and Spencer counties in Indiana; Butler, Davies, Hopkins, Muhlenberg, Webster, Lawrence and Breckinridge counties, Kentucky; and others in the three-state area. *Admitted by plaintiff, DPTF* 125.

96. These efforts were not successful, however, in acquiring new fields of strip coal reserves in the midwest. None of these fields were found to contain economically mineable coal. *Nugent Dep.* 436.

97. Subsequent to 1959, however, additions to UEC's reserves at existing mines were made at a faster pace than was true prior to the election of the Freeman-MSC representatives to UEC's Board. Thus, between August 1, 1949, and July 31, 1959, UEC produced a total of 35,591,999 tons of coal from its mines, but during this ten year period acquired only 350,000 tons more than it produced, or a total of 35,941,999 tons. In contrast, in little more than half the time—between August 1, 1959

and December 31, 1965—UEC produced a total of 27,976,011 tons, and acquired 15,400,000 tons of strip reserves more than it produced, or a total of 43,376,011. GX 23.

98. On all the evidence, it is clear that UEC's lack of strip reserves is in no way attributable to the acquisition of its stock by MSC and General Dynamics.

99. In view of the unavailability of economically mineable strip reserves in the west, UEC has undertaken exploration activities in the west. DX 29, 31; *Nugent Dep. Ex. 35, p. 3*; *Inman Dep. 160*; *Jensen Dep. 6*; *Tarzy Dep. 390-91*.

UEC's Lack of Deep Mining Experience

100. Since at least 1930, and continuing to date, UEC has had neither the equipment, personnel nor expertise required for successful entry into deep mining. *Morris Dep. 77, 194-197, 218*; *Morris Tr. 159*; *Camicia Tr. 1392*; *Camicia Dep. 194*; *Inman Dep. 14-15, 29, 158, 171-74*; *Tarzy Dep. 110*; *Ames Tr. 1698, 1708*; *Thorson Tr. 588, 892*.

101. Until 1959, in communications with stockholders, landowners and others in the industry, UEC held itself out as strictly a strip mining organization. The company stated in its 1956 Annual Report that for 38 years it had been engaged in the single business of mining coal by the strip or open pit method. *Kolbe Dep. Ex. 2, p. 7*. Periodically through the years, Frank Kolbe proclaimed that "underground mining is not our business" or the like. DX 1, 6, 8, 220, 221, 222; *Kolbe Dep. Ex. W*; *Kolbe Dep. Ex. X*; *Kolbe Dep. Ex. 12-13*; *Kolbe Dep. 448-450*. Kolbe never expressed any real interest in deep mining* and, as of 1955, top management of the com-

* Kolbe's lack of interest in deep mining is further demonstrated by his initial failure to recall during his deposition whether UEC had acquired the Round Prairie deep coal field, and his subsequent erroneous testimony that it must have been acquired when John Morris, rather than he, was president of UEC. *Kolbe Dep. 200, 203*. More than 20,000,000 tons had been acquired in this field while Kolbe was president. DX 60B.

pany had none.** *Morris Tr.* 159-65, 196-97; *Ames Tr.* 1697-98; *Inman Dep.* 180-81; *Tarzy Dep.* 108-113.

102. While Kolbe's deposition testimony on behalf of the Government was not completely consistent with his earlier writings, he did recognize that deep mining was "a very difficult job," a "tough business" and that "any organization would have to very, very careful going into the underground mining business." *Kolbe Dep.* 128, 130, 298. Kolbe explained why "we never did anything much" about underground properties:

"We always needed more equipment and we needed money for various things. To have gone into something completely new would have absorbed that money. We didn't have it. . . . [T]hese deep mines, as I say, would involve a measure of creativity on my part that I was not able at that time, I felt, to deliver, and I did not care to go into a business which I felt needed so much creativity as that deep coal would. . . ." *Kolbe Dep.* 133-135.

103. UEC's two attempts in the 1950's to engage in drift mining were short-lived and unsuccessful.* A drift operation was begun in June of 1952 at the Buffalo Creek mine in West Kentucky. *Kolbe Dep. Ex.* 55, p. 5. The attempt "failed miserably," however, and the operation was closed in 1954. *Kolbe Dep. Ex.* 57, p. 6; *Morris Dep.* 197; *Tarzy Dep.* 267-68. The losses involved were substantial, and Kolbe admitted the company had been wrong in going into this operation, "which I might recall to you is a common happening in the deep coal industry." *Kolbe Dep.* 400-402.

** Only UEC's land man, Mr. Latimer, because of his longstanding recognition of UEC's critical reserve shortage and its lack on an aggressive acquisition program, showed any interest in deep coal reserves at the time. *Morris Dep. Ex.* 47; *Latimer Dep.* 59.

* A drift operation is the easiest method of deep mining. It consists merely of mining into an already exposed level seam of coal. Since the side of the coal seam is exposed and accessible, none of the difficulties involved in the construction of shafts, hoists, and the like are present. *Camiciis Tr.* 1388-89.

104. In 1957 UEC purchased an experimental deep mining machine for use in a second attempt at drift mining at Buffalo Creek. The machine never worked and was junked. *Kolbe Dep.* 420-25; *DX* 1.

105. Under questioning by the Government as to what he might do *now* if he were running United Electric, Mr. Kolbe testified as follows:

"A. I would look into the deep coal. I must say that I would be a little hesitant. I would be very, very careful about it, because I don't believe, for instance, that Freeman makes any substantial amount of money.

"I think they are probably good operators. If people like that can't make money, why do you rush into a business like that?

"Old Ben, which I think is a very well-run company, last year earned 35 cents a ton before taxes. That's no sort of profit to make. . . .

"I would have had ideas, as a matter of fact, on different ways of deep coal mining. just like I did in strip coal mining. I might have revolutionized the whole thing."

"Q. [By Mr. Cusack] As you did with the Wheel Excavator and with Unimite on stripping? *

"A. Yes, yes, drills and one thing and another."

"Q. All right."

"A. I also was instrumental in getting the deep coal field into metallurgical coal. I mean, all of these things." *Kolbe Dep.* 207-208.

106. Prior to July 31, 1958, UEC had never acquired deep coal reserves not contiguous to strip acreage at existing mines. At July 31, 1958, UEC controlled only

* While Kolbe originally claimed to have invented Unimite and to have secured \$20,000 in connection with it from DuPont, he was forced to admit during cross-examination that it was patented by someone else, and that UEC was required to pay royalties in order to continue using it. Compare *Kolbe Dep. Ex. 2*, p. 9; *Kolbe Dep.* 60-63, 83-84 with *Kolbe Dep.* 654-664; *Kolbe Dep. Ex. S and T*. In any event, use of Unimite was subsequently discontinued because of its dangerous ingredients. As Mr. Kolbe put it, "they banged a car of it into another car and it went bang." *Kolbe Dep.* 665.

a total of 17,710,000 tons of deep reserves adjacent to existing strip operations at the Mary Moore, Buffalo Creek or Fidelity mines. Five million tons of these deep reserves had been acquired between August 1, 1957 and July 31, 1958 from Union Collieries (Union Electric Company) in order to obtain contiguous strip reserves. GX 23; DX 60B; *Morris Tr.* 221-22; *Morris Dep.* 809-310.

*Acquisition of the Round Prairie Field and
Assistance from Freeman*

107. Shortly after July 31, 1958, UEC began to acquire deep coal reserves in the Round Prairie field in Perry County, Illinois, *Morris Tr.* 170-172; DX 5. These acquisitions, at least in their initial stage, were an outgrowth of an undertaking by UEC for one of its customers two years earlier. *Inman Dep.* 164.

108. In 1956, UEC attempted to interest Amalgamated Industries, a company which had been a UEC customer for many years, in its reserves at the Fidelity mine as a fuel supply for a new plant. Amalgamated turned the proposition down because the life of the Fidelity reserves was not sufficient. *Kolbe Dep.* 672, 685-86. Instead, Amalgamated requested UEC to acquire deep coal reserves for it in the Beaucoup Field, Perry County, Illinois. *Dorrance Dep.* 7; *Morris Tr.* 168; *Inman Dep.* 189. Under the terms of the agreement reached, UEC was not to have "any right, title or interest to its own use or benefit" in the coal reserves it agreed to acquire for Amalgamated, unless the options were "dropped" by Amalgamated. *Kolbe Dep. Ex.* 61, paragraphs 4, 9.

109. UEC would not have acquired reserves on its own in the Beaucoup Field. *Inman Dep.* 156-57; *Ames Tr.* 1708; *Kolbe Dep.* 189. Cf. *Folsom Tr.* 2578.

110. Because of Amalgamated's interest in the Beaucoup Field, UEC began acquiring deep coal reserves for itself in the contiguous Round Prairie Field after July, 1958. *Inman Dep.* 164; *Sloane Dep.* 43-44; *Morris Tr.* 170-72; DX 5. By this time, John Morris and Frank Nugent were engaged in discussions and correspondence pertaining to deep mining possibilities. *Nugent Tr.* 1836-

37; *Morris Tr.* 169; *DX* 4; *Morris Dep. Ex.* 38. As Mr. Morris testified:

"A. When we had any underground coal that looked like it had any possibilities, I discussed it with them [Freeman] as to whether or not we should make any move on it, to try and get it.

"Usually Frank [Nugent] knew all about the field and knew what the possibilities were, and our prime interest was, of course, to try and find strip coal, but we did run across underground coal in our efforts, and when I did, I always talked to him about it.

"

"We had no underground people who knew anything about underground mining. We had no organization. We had no equipment readily available at all, and they [Freeman] did." *Morris Dep.* 76-77.

111. It was not until 1960, after Freeman representatives had joined the Board of UEC, that UEC first mentioned to Amalgamated the possibility that UEC might develop the Beaucoup or Round Prairie acreage. *Dorrance Dep.* 28-29, 34-35. Amalgamated was told, however, that the actual mining would be done in association with Freeman. *Morris Tr.* 173-75, 302-06; *Thorsen Tr.* 589, 894; *Ames Tr.* 1707-08. As Mr. Morris testified:

"I told everybody I was discussing any underground proposition with that we would have to utilize the ability and knowledge of Freeman, with whom we were closely associated, if we went into any underground mining." *Morris Tr.* 306.

112. In September, 1960, Morris discussed with Nugent the possibility of Freeman doing a feasibility study on the Beaucoup and Round Prairie deep coal acreage. *Kolbe Dep. Ex. L*; *DX* 113, p. 4049; *Morris Tr.* 172-73; *Inman Dep.* 164.

113. Since at least 1958, UEC has made it a practice to confer with Freeman regarding any deep mining possibility, and in doing so relied upon Freeman's judgment and expertise. *Ames Tr.* 1698; *Thorsen Tr.* 588, 892; *Morris Tr.* 168; *Inman Dep.* 164-65, 198-99; *Tarzy Dep.* 265-66, 270-72. *DX* 14-17, 18, 21, 25, 28, 32;

Morris Dep. Exs. 4, 5, 32, 35, 42, 46, 55, 62; Nugent Tr. 1848; Morris Dep. 195-96, 207-10, 226, 235, 275.

114. The evidence demonstrates that UEC never gave serious consideration to its deep coal reserves until the management of Freeman and UEC became closely associated. It was because of this association that UEC, for the first time, disclosed in its 1961 Annual Report to stockholders that it controlled deep coal reserves. *Kolbe Dep. Ex. 7, p. 7; DX 113, p. 4105; Morris Tr. 229; Thorsen Tr. 589.*

115. Based on all the evidence, it is clear that UEC's failure to acquire deep mining experience and expertise is in no way attributable to the acquisition of its stock by MSC and General Dynamics, and that UEC would not have gone into deep mining had it not been affiliated with Freeman.

Prior UEC Merger and Acquisition Attempts

116. The evidence establishes that during the 1950's UEC recognized the need to stem its deteriorating competitive position and that a merger was the only realistic way available to achieve this.

117. Around 1955, merger discussions took place between UEC and Truax-Traer Coal Company. It was believed by the management and Board of UEC that such a merger would be helpful to UEC in order to gain additional reserves. *Ames Tr. 1696.* Though the discussions may have been initiated by Truax-Traer, throughout "United Electric was rather the suitor, and . . . Truax was the unwilling bride". *Thorsen Tr. 585, 865-867; Nugent Dep. 335.*

118. In 1955, Theron G. Gerow, a mining consultant, prepared a valuation of the coal reserves and major equipment of both UEC and Truax-Traer. *Kolbe Dep. Ex. C and D.* Shortly thereafter, Gerow prepared a "Report on Proposed Merged Illinois Operations, Truax-Traer Coal Company, January 1956," in which he recommended that Truax, UEC and Little Sister Coal Company merge. One of the reasons given was that "unlike most mergers, the reserves and operations of the three companies are extremely closely related and the reserves

practically contiguous. Such a close interlocking of interests presents many opportunities for operation improvements and economies." *Kolbe Dep. E*, pp. I-1, I-4.

119. Frank Kolbe was "most anxious" for a Truax-UEC merger, and thought "it was a tragedy that it didn't go through." *Nugent Dep.* 338; *Kolbe Dep.* 60. However, by letter of October 9, 1956 to Henry Crown, Kolbe downgraded the value of Truax in comparison to UEC, stating, for example, that "in Southern Illinois Truax has much larger reserves than we do, but I do not think this is a particularly good place to have reserves." * *Nugent Dep. Ex. A*.

120. These merger discussions between UEC and Truax-Traer were renewed in 1960, though without success since Truax would not agree to the proposed terms of the merger. *Nugent Dep.* 332-34; *Nugent Dep. Ex.* 49. Truax-Traer had acquired Little Sister in 1956 and subsequently was itself acquired by Consolidation Coal Company in 1962. *GX* 87; *Kolbe Dep.* 516.

121. Unlike the affiliation with Freeman, a UEC-Truax-Traer merger would have combined two competitive coal companies. *Kolbe Dep.* 457 and *see defendants' Findings* 346-60;

122. Prior to 1959, UEC also attempted unsuccessfully to acquire the Sherwood-Templeton Coal Company, Little Sister Coal Company, The Unity Coal Company and the Denmark and Harmattan properties of Ayrshire Collieries. *Kolbe Dep.* 517-523; *Camicia Dep.* 164-65.

123. Despite these attempts, since its formation in 1919, and prior to its association with Freeman, UEC acquired or merged with no other coal company. *See also GX* 87.

* A number of predictions concerning UEC's future prospects set forth in the letter or contained in an accompanying merger evaluation study prepared by Mr. Kolbe dated October 8, 1956, failed to materialize. Compare *Nugent Dep. Ex. A* and *Kolbe Dep. Ex. A* with *Kolbe Dep.* 357, 358, 367-371.

IV. BACKGROUND OF THE ACQUISITION

124. The initial acquisition of UEC shares by Material Service Corporation was in 1954 and amounted to 72,600 shares. *Admitted by plaintiff, DPTF 145.* This amounted to more than 10 percent of the stock of the company. *DX 114.* By July 31, 1955, MSC had acquired almost a quarter of the outstanding shares of UEC, and a year later held approximately 34%. *DX 114.* As a result of these acquisitions, MSC in 1959, requested and received representation on UEC's Board of Directors. *DX 113, p. 3982.* As stated in UEC's Proxy Statement for 1959: "The management and the retiring directors, recognizing that the stock holding of Material Service Corporation entitled it to representation on the Board of Directors, determined to include the five new nominees on the management slate of directors." These were Frank Nugent, President of Freeman, Barton R. Gebhart, Vice President of Freeman, Irving Crown, President of MSC, Milton Falkoff, Vice President and Treasurer of MSC, and Reuben Thorsen, a partner in Paine, Webber, Jackson & Curtis, one of whose clients, Incorporated Investors, owned 10 percent of UEC's stock. *DX 114; Thorsen Tr. 582-84.*

125. These five new directors were elected to the UEC Board at the stockholders meeting on October 30, 1959. *GX 200, p. 3990.* At the UEC Board Meeting on November 10, 1959, John M. Morris, UEC's Sales Vice President and a Director since 1954, was elected President. Frank Kolbe became Chairman of the Board, a position created by a change in UEC's By-Laws adopted at that meeting. An Executive Committee was also established at this meeting with Frank Nugent as Chairman and Crown, Falkoff, Kolbe and Morris as members. *GX 200, p. 4003.* Nugent remained Chairman of the Executive Committee until 1966 when he was also elected President of UEC. *Nugent Tr. 1830.* Within a few years after he was made Chairman, Kolbe sold his UEC stock and resigned as Chairman and Director. *Kolbe Dep. 10.*

126. Shortly after the initial acquisition of UEC stock by MSC, Frank Nugent, President of Freeman, came to

realize that UEC, because of its shortage of coal reserves, was a company in liquidation. *Nugent Dep.* 415; *Nugent Tr.* 1835. Freeman, however, had underground coal reserves that could be mined by Freeman to back up UEC. Without such backup reserves, UEC's customers would stop purchasing coal from UEC before its reserves were exhausted. With Freeman's back-up reserves, however, UEC could enter into long term contracts to run out the reserves it had. *Nugent Dep.* 415-418. As Mr. Nugent testified, "Without the underground reserves to back them up, they are in no position to mine coal on the last day that those reserves are available, and those people who are buying coal from United are not going to wait until the end of United's reserves to make arrangements for their fuel supply." *Nugent Dep.* 415; see also *Sherwood Tr.* 1450-52; *Wood Tr.* 610; *Davis Tr.* 702, 730-31, 756-57; *Hill Tr.* 1086-88, 1097; *DX* 66, 104, 105.

127. Upon his becoming President in 1959, John Morris visited with each of UEC's major contract customers, told them of the UEC-Freeman association and pointed out the advantages he thought would follow: "A backup for United Electric Coal beyond their period of life at the properties we had, the know-how of underground mining which they had and we didn't have, and generally a much stronger company for them to depend upon as a supplier, which was becoming more important all the time the way the big utilities bought coal." *Morris Tr.* 191-192; see also *Wood Tr.* 659-60, 672; *Tomey Tr.* 335-38.

128. In 1958 Frank Nugent suggested to Henry Crown (Chairman of the Board of MSC) that United Electric and Freeman merge. Crown was in agreement. The merger did not take place immediately, however, because of the intervening merger negotiations between General Dynamics and MSC beginning in 1958, and GD's subsequent financial problems. *Nugent Tr.* 1839-40; *DX* 7.

129. After he joined UEC's Board in 1959 and became familiar with the company's affairs, Reuben Thorson also favored merging the operations of Freeman and United Electric because "United Electric had a strip coal problem . . . and the enlarging of the reserves was very

difficult to achieve and they had real problems. I could see the assets wasting away and the reserves in Freeman, as I understand it, were substantially greater, and that one company might well augment or supplement the other." *Thorsen Tr.* 586-587.

130. Based upon their review of the record, the expert economists for both sides at trial concluded that, as a practical matter, the merger of Freeman and UEC took place in 1959. *Steiner Tr.* 2253; *Folsom Tr.* 2461-62; 2572-73. Customers of the companies also took this view. *Davis Tr.* 701; *Steele Tr.* 999-1000; *Hill Tr.* 1083-84; *DX* 230. The plaintiff does not dispute this. *GF* § VIII, ¶s 1, 3, 6, at pp. 42-44.

131. Frank Kolbe was not in favor of the 1959 restructuring of the Board and management of UEC. *Morris Tr.* 243; *Kolbe Dep.* 759-760. When asked if he continued to be active in the management of the company, Mr. Kolbe testified that "I did some things. There's always a question whether you should get out or whether you should stay. If you get out, like the refugee in Germany or whatnot during the Nazis, if you get out you are powerless to influence events. You get out, you save your reputation, you do a lot of things, but you are out and you cannot influence events. My friends still had and I still had a big investment in the corporation. I stayed." *Kolbe Dep.* 760.

132. General Dynamics' acquisition of Material Service Corporation on December 31, 1959 was investigated shortly thereafter by the Antitrust Division of the Department of Justice, which took no action. At that time, General Dynamics owned 34 percent of UEC's outstanding common stock while no other shareholder owned as much as ten percent. The extent of General Dynamics' ownership of UEC stock was reported to the public at large at that time and continuously thereafter. *Admitted by plaintiff, DPTF* 147. The ownership of UEC stock by MSC has been made public in proxy materials published by UEC and filed with the Securities Exchange Commission on September 29, 1954 and annually thereafter. *Admitted by plaintiff, DPTF* 145; *DX* 114.

133. During its investigation of General Dynamics' acquisition of Material Service Corporation, the Antitrust Division was informed of the fact of, and the extent of, General Dynamics' ownership of both Freeman and UEC. In response to a request from Robert A. Bicks, Acting Assistant Attorney General, Antitrust Division, GD forwarded to the Government, by letter of May 25, 1960, a copy (enclosed in Exhibit C to the letter) of the November 24, 1959 Proxy Statement issued in connection with the MSC-GD merger. *DX 225; Maguire Dep. Ex. 1.* In this Proxy Statement, the fact that GD would acquire both the Freeman and UEC shares upon the merger was specifically noted. *Maguire Dep. Ex. 1, pp. 11, 13.*

134. Throughout the early 1960's, GD continued to purchase UEC stock, and, by 1966, immediately prior to the Tender Offer for the balance of UEC's outstanding shares, GD held a total of 445,773 shares, or 66.15% of the outstanding shares of UEC stock. *GX 225, 230.* In addition, throughout this period, the Material Service Profit Sharing Trust owned 46,400 shares representing approximately 6.8% of the outstanding stock of UEC. *GX 225.* GD's control of UEC was continually disclosed to the public throughout the 1960's. *Admitted by plaintiff, DPTF 145.*

135. At the Board Meeting on September 30, 1966, the directors of GD authorized the corporation to make an offer to purchase the remaining outstanding shares of UEC. Mr. Sargent "reviewed the various considerations in support of the management view that the minority interest in UEC should be acquired and that Freeman and UEC should be combined as soon as possible, including a review of UEC's limited coal reserves and the resulting problems UEC had encountered in obtaining and keeping long term contracts, the ability of Freeman to provide a backup of reserves over the long term and finally the requirement for a new chief executive officer and other key personnel on which action should be taken promptly." *Maguire Dep. Ex. 35; see also Maguire Dep. Ex. 34.*

136. The tender offer was successful. As of December, 1966, GD had acquired at least 90% of the outstanding

shares of UEC, and shortly thereafter UEC became a wholly-owned subsidiary of General Dynamics. *GP* § II, ¶ 4 at p. 4.

187. The Government filed its complaint on September 22, 1967, alleging that the UEC-Freeman affiliation violated Section 7 of the Clayton Act, and praying that General Dynamics be required to divest itself of its interest in UEC. *Complaint*.

V. BACKGROUND ON THE COAL INDUSTRY

138. Coal mining today is in the midst of a period of rapid and pervasive change. Major readjustment in the structure and patterns of coal production and distribution have been required, and continue to be required. As the report of defendants' expert economist, Dr. Steiner, notes, these dramatic changes constitute "a basic challenge both to individual coal producers and coal mining as a whole." * *Steiner Dep. EX. 2, paragraph 1, 2; Steiner Dep. 144-46*. This change has taken place in what the expert economists for both sides recognize as an "energy market." *Folsom Tr. 2455, 2556; Steiner Tr. 2138-49, 2246, 2385; Steiner Dep. EX 2, paragraph 10; see also DX 45, DX 102, pp. 13-14, 274; DX 150, pp. 52-54; DX 257, pp. II-2-II-4*.

Changes in the Demand for Coal

139. In 1920, coal accounted for 78.4 percent of the energy resources consumed in this country. With the exception of the years during World War II, coal's share of the energy market declined steadily thereafter, and by 1968 represented only 21.4 percent. *DX 85, Table V, Figure IV*.

140. Since World War II, coal has been a decreasingly effective competitor for a number of uses and has been

* As long ago as 1955, the president of the Chicago, Wilmington and Franklin Coal Company, a midwestern coal producer, had commented that "the coal mining industry has run into a series of evolutionary changes which have caused a shrinkage in demand for its product and have brought severely competitive conditions." *DX 48*.

unable to maintain its position as the dominant fuel in these categories; its position has either disappeared entirely or has been seriously eroded by the encroachment of other fuels. *Netschert Dep.* 9; *Peterson Dep.* 50; *DX* 85, p. 1; *DX* 102, pp. 274-276; *DX* 216.

141. Coal consumption in the United States declined from 441 million tons in 1947 to 277 million tons by 1954, primarily because coal lost its railroad and home heating markets to oil and gas. *Admitted by plaintiff, GF § III, ¶ 3 at p. 4.*

142. There is no longer a railroad market for coal, and, since World War II, the use of coal for space heating has declined 80 percent or more. Furthermore, its use in the industrial market has failed to keep pace with the growth of industry during this period. *Netschert Dep.* 14, 81; *Peterson Dep.* 50; *DX* 85, p. 1; *DX* 85, Table II, Figure II, Tables III, V, XI, XII, and XIV; *DX* 102, pp. 274-76; *DX* 216; *Kolbe Dep.* 57, p. 5.

143. Coal's decline in these markets will continue as additional residential and industrial consumers convert to oil and gas.* *Netschert Dep.* 14, 157-158; *Gerber Dep.* 110; *Walker Dep.* 10, 12-13; *DX* 216.

144. The net result of these losses has been a diminished position for coal in the overall energy resource consumption pattern. Coal consumption in 1967 and 1968 was less than in 1947 and 1948. *DX* 85, p. 1, *DX* 85; Tables III, IV, V, Figures III, IV; *DX* 102, pp. 21, 275; *DX* 216.

145. These national trends and patterns are paralleled in the midwest. *Netschert Dep.* 11, 119; *Walker Dep.* 7-14; *Peterson Dep.* 10-11; *Davis Tr.* 698-99; *Redard Dep.* 5-7; *Nix Dep.* 16; *Brazzale Dep.* 5-8; *Beck Dep.* 8-9; *King Dep.* 17; *Stiehl Dep.* 14-15; *DX* 85, Table XI.

* As one retail coal dealer in Chicago expressed it: "We feel that the retail coal industry, as an industry, if you can call it that, has a life of only about five years . . . I think you could compare it to the ice business." *Peterson Dep.* 14.

*Emergence of Utility Demand as the
Principal Market for Coal*

146. As a result of market losses to other forms of energy, the utility market has become the mainstay of coal production, although the use of coal has not kept pace with the growth of utility output. *Netschert Dep.* 139-40; *DX 85, Tables I, III, XV.*

147. But in the utility market as well, coal faces competition from other sources of energy, including not only natural gas, oil, and nuclear fuel, but also, through technological advancement, such emerging competitors as pumped storage and geothermal energy. *Tremmel Tr.* 800-03; *Walker Dep.* 14-25; *Peterson Dep.* 8-10; *DX 85, p. 1; DX 85, Tables VI, VII, VIII, X, XII, and XIII; D 102, pp. 13-14, 274-76, 295-98; DX 150, pp. 52-54; 257, pp. II-2-II-4.*

148. Coal's present dominant position in the utility industry will suffer increasing erosion, and nuclear energy may eventually displace coal entirely as an energy source for midwest utilities. *Netschert Dep.* 14, 38, 93-95. Ernest Tremmel, Director of the Division of Industrial Participation of the United States Atomic Energy Commission, expressed the view that, in the long term, electricity could be generated at the lowest cost by a utility system combining nuclear and pumped storage facilities,* together with gas turbine peaking units.** *Tremmel Tr.* 810; *see also DX 215.*

149. More immediately, air pollution abatement regulations will have an adverse impact on coal during the next 10 to 20 years due to their effect on interfuel competition and consumption patterns of coal. *DX 85, p. 2; DX 89, p. 63; DX 216; DX 257, p. II-4.* There will be a tendency to turn to other fuels—gas, oil, nuclear—as a means of coping with such regulations. The net effect will be an increase in the consumption of these fuels at the expense

* Pumped storage facilities are described in Finding 238.

** "Peaking units" are generating facilities put in operation during periods of high electricity consumption. *See Abrahamson Dep.* 38-39.

of coal. *Netschert Dep.* 69; *Tremmel Tr.* 803-04; *Peterson Dep.* 26, 28-39; *Walker Dep.* 23-25.

150. In their Report to the Federal Power Commission, the West Central Region Advisory Committee * predicts that in the midwest, coal's share of the electric utility market will decline from 72.2 percent in 1966 to 22.2 percent by 1990, and nuclear energy's share will increase from 1 percent to 69.7 percent in the same period. *DX 257, p. II-5.* As this Report states:

"During the period 1970-1990, electric generation will be dependent upon five basic forms of energy—coal, gas, oil, hydro, and nuclear. . . . Coal, however, will be faced with continuing pressures from other forms of energy, and based on present trends the most significant competition will be from nuclear energy. . . . *DX 257, p. II-9.*

151. Thus, the competitive situation within the energy markets as a whole is already more fluid than it has ever been before and will become more fluid in the future. *DX 85, p. 2.* Dr. Bruce C. Netschert, an expert in energy economics concludes that:

"Competition is today more severe, more keen, among the fuels and between the fuels and between the fuels and electricity, and inter-substitutability is also greater than it has been before. . . . [B]oth this competition and this inter-substitutability is likely to increase in the future. The choice facing the consumer is wider than ever before and will become still wider." *Netschert Dep.* 53.

* This Committee includes top executives of Commonwealth Edison, Northern States Power, Wisconsin Electric Power, Union Electric Company and Illinois Power Company, among others. *DX 257, p. iii-iv.* With the exception of Indiana, West Kentucky and Western Tennessee, the West Central Region encompasses all of the Government's so-called Eastern Interior Coal Province Sales Area (EICPSA). *DX 257, p. S-1; compare GF § VI, ¶ B(2) at p. 18.*

Changes in the Production of Coal

152. The fact that coal continues to be one of the suppliers of the energy requirements of the electric utilities reflects the success of coal producers in delivering coal at a low cost per BTU. *DX 85, Table XXIII, XXIV, DX 102, p. 132; DX 257, Table 2, p. II-12; Steiner Dep. Ex. 2, paragraph 7.* As the Report to the Federal Power Commission of the West Central Advisory Committee makes clear, "During the past twenty years the coal industry has contributed a great deal to the stability of fuel prices." *DX 257, p. II-9.*

153. That coal producers have been able to do this, despite sharply rising costs, reflects the technological revolution that has led to enormous increases in productivity, and to the ability to negotiate bulk shipment and unit train freight rates. Both coal prices and coal rail rates have increased far less than other prices in the economy. *Steiner Dep. Ex. 2, paragraph 7; DX 85, Tables XX, XXV, Figure VIII; DX 102, p. 132; DX 150, pp. 54-55, 59-60, 62; DX 257, p. II-9; DX 257, Figures 2, p. II-18.*

154. Since 1947, and despite a substantial rise in the level of the wholesale price index and labor costs, the delivered price of energy from coal has remained relatively stable. *Admitted by plaintiff, DPTF 50.* In fact, allowing for inflation, the price of coal at the mine-mouth today is actually less than it was at the beginning of the post-war period. *DX 85, Tables XX, XXI, XXIV.*

155. Since World War II, wage costs and fringe benefits have increased markedly in the coal industry. *DX 85, p. 3; DX 85, Table XVI; DX 102, pp. 15-16, 132.*

156. There has been a virtual revolution in mining technology, with the introduction of wholly new techniques, significant improvement in old techniques and a substantial increase in scale. *DX 85, pp. 3-4; Tables XVIII, XXII, XXVI, XXVII; Netschert Dep. 88-90; DX 257, pp. II-2, II-9.*

157. The effect of these technological changes has been to increase productivity (as measured in output per man-day) sufficiently to enable the F.O.B. mine price of coal

to be kept competitive and relatively stable in the face of general inflation in wholesale prices. *DX 85, p. 4; DX 85, Tables I, XIX, XXI, Figures VIII, IX; DX 102, Table 40, p. 280; DX 102, p. 282; DX 257, p. II-9.*

158. Since World War II, the increased competitive pressure on coal in the utility market has led to increased pressure on the railroads to offer lower rates and has generated major technological innovations in railroad transportation, such as the unit train, which have permitted lower rates. *DX 85, pp. 4-5; DX 85, Tables XXIII, XXIV, XXV; DX 150, pp. 59-60; DX 257, p. II-15; Netschert Dep. 104-106.*

Changes in the Structure of the Coal Industry

159. The effect of the changes since World War II in the patterns of coal consumption and marketing, in labor costs, in mining technology, in productivity, in coal preparation procedures and in transportation costs has been to enhance the economies of scale in coal production and to greatly increase capital requirements. This, in turn has led to an increase in the size of mines. *DX 85, p. 5; DX 85, Table XXVII; DX 102, pp. 207-08; Steiner Tr. 2127-28.*

160. Eighty three percent of the coal produced in 1967 in Illinois, Indiana and West Kentucky, for example, was produced at mines with annual production exceeding 1 million tons; and 49 percent from mines producing more than 2 million tons a year. *Admitted by plaintiff; DPTF 44A.* Moreover, of the 36 mines placed in operation or announced in Illinois, Indiana and West Kentucky since 1958, none was smaller than 500,000 tons annual capacity, 29 were of a 1,200,000 tons annual production size or greater, and 20 produced or will produce 2 million tons or more per year. *DX 87, Table 4.* Clearly, mines of this size can only be operated by large coal producers. A two million ton strip mine, for example, would cost between \$12.7 million and \$23.5 million to construct, depending upon the overburden ratio,* and would neces-

* The overburden ratio expresses the amount of overburden (cubic yards) which must be removed to uncover a ton of coal. *DX 87, pp. 24-25.*

sitate 40 million tons of coal reserves. *DX 87, Table 5a.*

161. There are fundamental differences between the mines of the eleven "leading" * coal producers in Illinois, Indiana and West Kentucky and the mines of the approximately 26 other coal producers. The latter are typically located in the West Kentucky or Southern Illinois Freight Rate Districts; have extremely limited coal reserves; produce small annual tonnages; operate only under very favorable strip mining conditions or are shallow deep mines; do not have substantial processing facilities; have limited transportation facilities; and usually sell through agents or dealers rather than directly to customers. They rarely sell under long-term contracts with utilities. *DX 50; King Dep. 5-6, 38; Stiehl Dep. 4-5, 18-19; Beck Dep. 4, 8, 38-39; Camicia Tr. 1444-45.*

162. These small producers do not and cannot constitute a substantial supply source for the energy requirements of electric utilities. Small producers are, for all practical purposes, in a "different business." *Beck Dep. 8; see also Steiner Tr. 2240-41; King Dep. 38; Stiehl Dep. 18-19; Beck Dep. 39; Camicia Tr. 1444-45; Davis Tr. 694-95, 764; Steele Tr. 938-39; Wood Tr. 659-60; Tomey Tr. 333-38; Schotters Dep. 11-12; Nicosin Dep. 37-38.*

163. The increasing predominance of the electrical utilities as purchasers of steam coal, the increase in the designed capacity of new electric generation units, and utilities' insistence on a large, reliable, and low price source of fuel over the 20 or 30 year life of a generating facility, have led to the emergence and survival of coal producers with large reserves, developing large mines which are devoted to serving a small number of customers on long-term contracts. *Steiner Dep. 269-73; Tomey Tr. 333-38; Steele Tr. 938-39; Davis Tr. 694-95, 764; Wood Tr. 659-60; Camicia Tr. 1444-45; Schotters Dep. 11-12; Nicosin Dep. 37-38; Steiner Dep. Ex. 2, paragraph 4; DX 86, pp. 2-5; DX 216.*

164. The progressive disappearance of the small coal producer reflects the disappearance of the railroad mar-

* In its statistical exhibits, the Government has designated certain midwest coal producers as "leading producers." *See, e.g., GX 72, 85.*

ket and the decline of the space heating market, the retail market and spot coal purchases by utilities. *Steiner Dep.* 276-80; *Steiner Tr.* 2127-28; *Folsom Tr.* 2581; *Steiner Dep. Ex. 2, paragraph 5*; *DX* 86, pp. 7-8; *DX* 216.

165. The coal industry has not only exhibited any signs of anticompetitive performance and behavior, but the past performance of the industry suggests there has been intense competition among coal producers. *Steiner Tr.* 2142-45; *Steiner Dep.* 193; *Steiner Dep. Ex. 2, paragraph 3*. As one utility executive put it, "I think we have as much competition today for our coal supply as we ever had." *Schotters Dep.* 17; *see also Wood Tr.* 661; *Stiehl Dep.* 16; *Hill Tr.* 1113; *Steele Tr.* 936, 940-41.

166. The already intense competition which midwest coal producers face is likely to increase even more in light of competition from nuclear energy and other alternative fuels, growing concern with air pollution, pressures from large, informed and capable buyers of coal, and the presence of a substantial number of viable coal competitors. Coal producers will be under continuing pressure to reduce costs and keep prices low if they are to continue to serve their last remaining large market for steam coal. "The large coal company" as Professor Steiner, defendants' expert economist put it, "will have no easy life nor protected position." *Steiner Dep. Ex. 2, paragraph 8, 9*; *see also Steiner Tr.* 2146-49, 2151-54; 2243-47, 2437-38; *Steiner Dep.* 185; *DX* 85, pp. 1-2, *DX* 102, pp. 13-14, 20-23, 274-294; *DX* 150, pp. 52-54; *DX* 216; *DX* 257, pp. II-2, II-4, III-6. As another of the defendants' experts saw it:

"The fact that Commonwealth Edison is already on line or under construction with enough nuclear capacity to account for somewhere, as I recall, between a third and forty per cent of its total capacity by the mid-1970's, is very sobering for the coal industry." *Gerber Dep.* 26.

VI. BACKGROUND AND DESCRIPTION OF THE UTILITY INDUSTRY, THE PRINCIPAL MARKET FOR COAL

167. Since 1946, a constantly increasing percentage of total coal production has gone to electric utilities as railroad, retail, and industrial markets have been lost to other fuels. *DX 85, Table I; DX 216*. This trend was true in the midwest and will undoubtedly continue. *DX 216; Gallagher Dep. Ex. 1-3; Steiner Dep. Ex. 2, paragraph 2*. Thus, while some 70% of UEC's 1967 sales were to electric utilities, by January 1, 1969 more than 82% of UEC's mineable reserves had been sold to electric utilities under long-term contracts. *DX 63; UEC Response to Government Sales Questionnaire*.

168. In 1967, approximately 75 percent of the coal production in Illinois, Indiana and West Kentucky was shipped to electric utility generating stations. *Admitted by plaintiff, DPTF 38*. In each of the years 1965 through 1967, the largest coal customers in Illinois were steam electric utilities. *Admitted by plaintiff, GPTF § V, 1A (13) at p. 20*.

169. In 1967, 72% and 89% of the coal produced, respectively, in the Fulton-Peoria and Belleville Freight Rate Districts, wherein all of the mines of United Electric are located, was sold to electric utilities. 95% and 71% of the coal produced, respectively, in the Springfield and Southern Illinois Freight Rate Districts, wherein all of the mines of Freeman are located, was sold to electric utilities. *Admitted by plaintiff, DPTF 38A*.

How Utilities Purchase Coal

170. In considering whether a particular coal mine can compete for the business of an existing power plant, several factors must be weighed. These include the cost of coal at the mine, the location of the mine relative to the consumer's plant, transportation costs, the BTU content of the coal and the suitability of the physical and chemical properties of the coal produced by a given mine for the particular plant facility involved. *DX 86, p. 2; see also Findings 283-96*.

171. In the case of a new utility plant, coal supply arrangements are almost always made prior to plant construction, since the facility's coal burning equipment will be specially designed to handle the type of coal that is to be made available. Arrangements for transportation of the coal are also likely to be made in advance. As a result, the location and design of a plant are frequently determined by the coal supply arrangements that can be made. *DX 86, p. 4; Steiner Dep. Ex. 2, paragraph 5; Gerber Dep. 62-63, 118; Tomey Tr. 334; Gamble Tr. 1261-62; Corey Tr. 1599; Hill Tr. 1095; Nicosin Dep. 37-38; 51-52.*

172. Because of (1) the need to assure a supply of coal that satisfies the physical and chemical requirements of the equipment designed, (2) the complexities of administering multiple coal contracts and (3) the development of large-scale transportation arrangements with their attendant economies, coal supply for large power plants is likely to be developed with relatively few producers. Indeed, many plants are supplied by only a single producer from a single mine opened specifically to serve that single facility. Such supply arrangements also exist in the case of mine-mouth generating plants where the adjacent mining property is expected to meet the lifetime requirements of the plant. *DX 86, pp. 2, 5; Gerber Dep. 19-23; Steiner Dep. 272-73; Gamble Tr. 1260-62; Hill Tr. 1099-1101; Corey Tr. 1607-10; Davis Tr. 748-51; Nicosin Dep. 37-41; Ward Dep. 17; Abrahamson Dep. 18; DX 93; DX 102, pp. 217-18; DX 150, p. 59, DX 257, p. 11-15.*

173. In arranging for its coal supply, a utility will not only seek the lowest possible price per BTU of delivered coal, it will also seek assurance of the coal supplier's capability of providing the required quantities of coal over a long period of time. Utilities are therefore concerned about the reliability of the coal supplier and his past record of performance in satisfying contractual commitments. *DX 86, pp. 3-4.* As one of the consumer witnesses emphasized, when a utility is arranging for the fuel supply for a modern generating station representing an investment of several hundred million dollars, it wants "to know that the people you sign a contract

with are able to produce on their end of it." *Tomey Tr.* 336, 338; *Gamble Tr.* 1263.

174. A utility will weigh heavily its previous experience with potential suppliers and will carefully investigate the availability of adequate reserves within the supplier's control to satisfy the contractual commitments. The utility will seek independent geological verification of the existence and size of the coal reserve and the physical and chemical properties of the coal, as well as the producer's technological capabilities. *DX* 86, p. 4; *Hill Tr.* 1113; *Gamble Tr.* 1263; *Wood Tr.* 678-79; *Steele Tr.* 996-97.

175. Since 1947, the average size of steam-electric generating plants, and units within those plants,* has increased enormously. By 1966, the average size of new units being installed was almost as large as the combined total size of *all units* at existing plants. *DX* 86, *Table following* p. 9; *see also DX* 257, pp. III-1-III-3.

176. The increasing size of electric power generating units and plants has been accompanied by an increase in the quantity of coal required at such facilities. A large, modern coal-fired generating unit of a thousand megawatt capacity would require, over its 30 year life, a total of 70 million tons, or approximately 2½ million tons of coal annually. A plant containing three such units (a size likely to become increasingly commonplace) would, therefore, require committed mineable reserves of well over 200 million tons. *DX* 86, p. 3; *Gerber Dep.* 89-91; *Gamble Tr.* 1248-49; 1260-63; *Corey Tr.* 1607-10; *Hill Tr.* 1095-97, 1101; *Tomey Tr.* 334, 337; *Davis Tr.* 694-95; *Schotters Dep.* 12; *Nicosin Dep.* 37-38; *Ward Dep.* 13-14; *DX* 93.

177. A 1000 megawatt plant may cost as much as 150 to 200 million dollars. This major investment can be jeopardized by a disruption in the supply of coal. Utilities are, therefore, concerned with assuring the supply of coal to such a plant over its life. In addition, utilities

* Steam electric generating plants are frequently made up of two or more units. One method of increasing a utility system's generating capacity is to add one or more units to an existing plant. *See, e.g., Moser Tr.* 1509.

desire to establish in advance, as closely as possible, what the fuel costs will be for the life of the plant. For these reasons, utilities typically arrange long term contracts for all or at least a major portion of the total fuel requirements for the life of the plant. *DX 86, p. 3; Gerber Dep. 89-91; Gamble Tr. 1248-49; 1260-63; Corey Tr. 1607-10; Hill Tr. 1095-97, 1101; Tomey Tr. 334, 337; Davis Tr. 694-95; Schotters Dep. 12; Nicosin Dep. 37-38; Ward Dep. 13-14; DX 93.*

178. Illustratively, of the 74 million tons of coal purchased in 1967 by midwest utilities (other than municipal utilities) from mines in Illinois, Indiana and West Kentucky, approximately 76 percent was purchased under contracts of 5 years or longer and 43 percent was purchased under contracts of 15 years or longer duration. *Admitted by plaintiff, DPTF 42.*

179. The long-term contractual commitments are not only required from the consumer's standpoint, but are also necessary from the viewpoint of the coal supplier.* Such commitments may require the development of new mining capacity. As a rule of thumb, a mine capable of producing a million tons of coal annually required in 1969 an investment of between six to ten million dollars. Coal producers have been reluctant to invest in new mining capacity in the absence of long term contractual commitments for the major portion of the mine's capacity. Furthermore, such long term contractual commitments are often required before financing for the development of new capacity can be obtained by the producer. *DX 86, pp. 4-5; Gerber Dep. 90, 104-05; Kolbe Dep. 306; Hill Tr. 1101; Gamble Tr. 1260; Corey Tr. 1609; Nugent Dep. 431; DX 87, p. 27; DX 93.*

Decline of the Spot Market for Coal

180. This trend toward long term contractual commitments to meet the total requirements of a particular electric power generating plant has tended to eliminate the spot market for coal. From time to time, a utility

* See, in this connection, *Tampa Electric Co. v. Nashville Coal Co.*, 365 U.S. 320 (1961).

consumer may purchase small quantities of coal on the spot market and long-term contracts are often written to permit some flexibility in this regard. However, because utilities are increasingly arranging for bulk transportation of coal supply on a long-term basis, the opportunities for spot purchases are declining except in those cases in which small mines may be located in such proximity to make them capable of providing some relatively small deliveries at low cost. *DX 86, pp. 7-8; Hill Tr. 1099-1101; Steele Tr. 938-39; Tomey Tr. 333; Gaunt Dep. 10, 49-50.*

181. The rail rate cost advantages of train-load deliveries compared to car-load deliveries are such as to limit the desirability of such spot purchases. Furthermore, the growing practice by coal producers of expanding mine capacity only to meet long term contractual commitments, and the gradual disappearance of the small truck mines has tended to limit the production capacity available for spot sales. *DX 86, p. 8; DX 102, pp. 207-08; Hill Tr. 1101.*

Competition for Utility Contracts

182. Because of the trend toward long term contracts and away from spot purchasing, competition in the electric utility market is not continuous in the sense that coal producers seek new orders from a given facility on a daily, monthly or even annual basis. Rather, competition tends to be a "one time thing." Once the initial coal contract is executed, competition to satisfy the coal requirements of a particular plant is effectively precluded for an extended period of time amounting to as much as 15 years or even the full life of the plant. *DX 86, p. 5; Gamble Tr. 1262; Tomey Tr. 333-34; Hill Tr. 1095-96, 1101; Davis Tr. 694-95; Corey Tr. 1606-10; Ward Dep. 13-14; Nicosin Dep. 37-38; Schotters Dep. 12; Steiner Dep. Ex. 2, paragraph 11.*

183. This competition for long-term supply contracts, rather than competition for the sale of coal already produced, is of a kind in which a small producer or a producer without large reserves cannot effectively partici-

pate. This has led to the disappearance of such producers as active competitors in the utility market. *Steiner Dep. Ex. 2, paragraph 5; DX 86, pp. 3-5; Steiner Tr. 2127-28; Folsom Tr. 2581; Camicia Tr. 1444-45; Sherwood Tr. 1450-52, 1464; Morris Dep. 304; see also Findings 160-162.*

184. Further, the innovations in the coal industry that have made competitive prices possible have created the need for large scale production and thus for large companies. *Steiner Dep. Ex. 2, paragraph 7; see also Findings 159-164.* As Professor Steiner concluded:

"It seems to me that the increase in the size of coal-mining companies and the concentration of more production and fewer mines, and with more of the output of a given mine devoted to a particular source, have been just unavoidable parts of the total picture." *Steiner Dep. 176.*

Significantly, Mr. Folsom, the government's economist, agreed with this analysis. *Folsom Tr. 2581.*

185. Correspondingly, mergers within the utility industry have both diminished the number of utility companies and increased the purchasing power of those surviving. Since 1955, there have been more than 50 mergers among midwestern public utilities. *DX 85, Table XXIX; DX 102, pp. 208-211; DX 181-83; DX 234, p. 8.*

186. In 1967, the four largest utility companies in the midwest, ranked by coal consumption, accounted for 53% of the coal consumed by electric utilities in the states of Illinois, Indiana, Wisconsin, Iowa, Minnesota, Missouri-Kentucky, and Tennessee. Commonwealth Edison alone consumed approximately 33% of the total coal production of the Freight Rate Districts in which Freeman or UEC mines are located. *Admitted by plaintiff, DPTF 40; see also DX 85, Table XXX.*

187. Fuel expenditures are a major component of a utility's operating costs.* In light of this, electric utilities typically regard fuel purchasing as a top executive

* For example, in 1969, almost 50 percent of Commonwealth Edison's operating expenses, excluding depreciation, were accounted for by fuel and power purchases. *DX 90, p. 4.*

responsibility and the buyers are characteristically sophisticated about the available alternatives. This is another source of pressure on coal producers to seek to minimize costs and to keep prices low. George Gamble, a director of Union Electric Company, testified that coal contracts would characteristically be reviewed by the company's Executive Committee, as well as its Board of Directors. As he explained: "If you sign a [coal] contract for \$130 million, why, you want to have a pretty good company feel of that before you undertake to do so." *Gamble Tr.* 1264. Similarly, Elmer Hill, formerly of TVA, testified to the care taken in evaluating coal bids:

"We had a staff of engineers. Each time we evaluated offers for supply to any of TVA's facilities, the reserves were checked, the equipment to be employed in supplying the coal was evaluated. With the engineering knowledge and know-how as to mining, it could reasonably be determined what the cost for production would be." *Hill Tr.* 1113.

See also *Gamble Tr.* 1263-65, 1267-68; *Schotters Dep.* 3-4, 14-15; *DX* 150, p. 51; *Steiner Dep. Ex. 2*, paragraph 9, 12; *Steiner Dep.* 319-21; *Steiner Tr.* 2243-45, 2439-40; *Steele Tr.* 930-31; *Davis Tr.* 686-87; *Hill Tr.* 1071; *Moser Tr.* 1508; *Corey Tr.* 1580-82; *Tomey Tr.* 321-22; *Gamble Tr.* 1233-35; *Wood Tr.* 598; *Ward Dep.* 5-6; *Nicosin Dep.* 6-7; *Redard Dep.* 5; *Gaunt Dep.* 3-4, 41; *Morrison Dep.* 4-5; *Abrahamson Dep.* 3-5.

Bargaining Power Of Utilities

188. Further, utilities have and use the ability to play coal producers against one another. As the president of one utility stated: "We attempt to use whatever leverage we can to get the prices we can." He explained that his company at the outset attempts to get a low-cost contract with one coal supplier, and then tries "to use that leverage on our other suppliers to obtain substantially the same price." *Davis Tr.* 745, 759. Finally, interfuel substitutability provides an additional bargaining advantage to utilities. *Steiner Dep. Ex. 2*, paragraph 9, 12; *Steiner*

Dep. 319-21; 323-25; *Steiner Tr.* 2243-45, 2250; *Nicosin Dep.* 81; *Schotters Dep.* 12-13.

189. The bargaining power of utilities will increase even more in the years ahead, as midwest utilities pool their purchasing power by joining together to coordinate the planning, construction and utilization of generating and transmission facilities. *DX* 232, 233; *DX* 257, *Section IV and Appendices A, B, and C.*

190. As a result of the foregoing, and because they purchase coal in huge quantities, utilities have substantial market power vis' a vis' coal producers. George Gamble described this balance as follows:

"Anytime that you are in a position to sign up over a period of 15 or 20 years for a block of business between \$50 and \$100 million, you've got power in the market, and [if] coal producers can get hold of a large contract, which would run over a number of years, why, they know what they can afford to do in the shape of opening mines and buying machinery, and it's a very important thing to them.

"Consequently, there is a great economic power in the hands of the coal purchaser." *Gamble Tr.* 1264-65.

191. Recognizing the validity of this analysis, the Government concedes that utilities have at least "equal bargaining power" with coal producers in the midwest. The dimensions of that power are reflected in the Government's haste to point out that Commonwealth Edison does not take "unfair advantage" of midwestern coal producers. *GF* § VI, ¶ C(9) at p. 25.

VII. INTERFUEL COMPETITION

A. COAL IS FACED WITH INTENSE COMPETITION FROM OTHER FUELS

192. Energy resources consumed in the midwest include, among others, coal, natural gas, oil, nuclear energy and hydropower. *Admitted by plaintiff, DPTF* 13.

193. Coal, gas, oil and nuclear energy produce heat,

measured in terms of BTU's (British Thermal Units). Heat thus produced by any one of these energy resources can be used for various purposes, including the generation of electricity. Hydropower is also used to generate electricity. *Admitted by plaintiff, DPTF 14.*

194. Coal, oil and gas are also used to produce space and processing heat. *Admitted by plaintiff, DPTF 15.*

195. Coal, oil, gas and nuclear energy compete with one another in the utility, space heating and process heat markets; * electricity (including that generated by hydropower and pumped storage) in turn competes with coal, oil, gas and nuclear energy for parts of these same markets. *DX 102, pp. 13, 274; DX 85, 1-2; Tremmel Tr. 800-803, 812-813; Gamble Tr. 1266-67; DX 3.*

196. Coal's share of the energy market reached its peak in 1910. Since then, coal's position has been eroded in one market after another. The railroads, once coal's mainstay, have been completely lost to oil through dieselization. The use of coal for space heating has already suffered a dramatic decline and is expected to disappear completely within five to ten years at the most. *DX 85, pp. 1-2, DX 102, pp. 274-76; and see also Findings 134-142.*

197. Interfuel competition will continue to erode coal's share of the energy market as more and more industrial consumers convert from coal to gas or oil, and as these fuels, along with nuclear energy and the emerging technology of still other alternative power generation sources, further challenge coal's share of the fuel needs of electric utilities. *DX 150, p. 54; see also Findings 147-148.*

198. Competition among fuels is a complex of economic, technological and political forces, and results from the ability and willingness of energy consumers, in light of these forces, to shift from one fuel or supplier to another. *DX 102, pp. 13, 274, 276; Gamble Tr. 1267-68.* As a recent report of the Federal Trade Commission points out in a chapter contributed to by the Government's rebuttal economist:

* Process heat is that used in the manufacture of chemicals, drugs, foods, glass, metals, cement and the like. *See DX 102, p. 22.*

"There is a high elasticity of substitution among coal, fuel oil and natural gas as raw materials from which energy is produced. This is particularly marked in the case of electric utilities which have constructed generating stations so they can ultimately consume any of the three principal fuels." *Folsom Tr.* 2493-94.

199. In determining the type of fuel to be used, a consumer reviews and evaluates a number of factors. Thus, the choice between competing fuels depends not only on delivered price, but on such matters as relative thermal efficiencies and differences in capital costs of burning equipment as well. The costs of storing, handling, and in some instances, disposing of the fuel by-products or residue, for example, are economic factors which can make a low-cost fuel the most expensive fuel. These costs become a particularly important consideration in selecting a proper fuel in locations where land costs are high and areas heavily congested. In some areas, operating considerations, such as air pollution control regulations, may require a premium priced fuel and foreclose consideration of others. *DX* 150, pp. 52-53; *Gamble Tr.* 1269-70.

200. Energy consumers themselves attest to the vigorous competition coal encounters from other fuels in the market place. As the representative of one midwest utility testified at trial: "Certainly competition among coal suppliers is a big factor [in controlling the cost of coal], but I believe overriding this, which sets the overall competitive picture, is the alternate fuel competition. There is competition among all fuels as well as among coal suppliers." *Wood Tr.* 661; *see also Steele Tr.* 936, 940-41; *Gamble Tr.* 1266-70; *Davis Tr.* 693, 698-700; *Moser Tr.* 1516, 1573-74; *Corey Tr.* 1585; *Tomey Tr.* 325-26; 403; *Hill Tr.* 1083; *Morrison Dep.* 8-13, 26; *Abrahamson Dep.* 28, 61-62; *Gaunt Dep.* 22-23; *Ward Dep.* 27-28; *Schotters Dep.* 9-11, 39; *Nicosin Dep.* 46-49; *DX* 36; *DX* 67; *DX* 71-72; *DX* 74-75; *DX* 78; *DX* 90; pp. 7, 9, *centerspread*; *DX* 93; *DX* 95; *DX* 96; *DX* 99; *DX* 100; *DX* 146; p. 8; *DX* 147, p. 13; *DX* 148, p. 6; *DX* 149, pp. 3, 12-13; *DX* 230; *DX* 242.

201. Coal producers, as well, confirm the intense competition they face from suppliers of alternate fuels. *Beck Dep. 8; King Dep. 17; Stiehl Dep. 14-16*. When the president of one midwest coal company was asked for specific examples where competition from other fuels had had an effect on his ability to sell coal, he responded "I have as many examples as you have time." *Stiehl Dep. 14*.

Competition from Gas and Oil

202. The extensive competition which coal faces from gas and oil may be seen in the responses of midwest coal consumers to the questionnaire forwarded them under subpoena issued by the Court. While the survey was directed solely to coal consumers, and thus takes no account of facilities consuming *only* other fuels, it reveals that, even among those midwest facilities (both utility and non-utility) which consume substantial amounts of coal, some 48% have already installed the capability of consuming either gas or oil as well. *DX 59, Table C*.

203. The Subpoena Questionnaire responses also demonstrate widespread actual usage of gas and oil as alternative fuels by these utility and non-utility facilities. Thus, nearly half of those facilities with an oil capability actually used oil during 1967 while of those facilities with a gas capability, 80 percent actually consumed gas for six months of the year or more. *DX 59, Tables C, D, E*.

204. Whether or not facilities actually consume gas or oil, however, their dual or triple fuel capability is a device used by them to play one energy source against another in keeping their fuel costs at a minimum. *Peterson Dep. 9; Wood Tr. 600; DX 74; DX 149, p. 3*.

Industrial Consumers

205. Coal has already lost its once dominant position with midwest industrial energy consumers. It has been estimated that 45 percent of all such facilities in the midwest have already turned to gas, while another 20 percent have switched to oil. *Walker Dep. 11-12; Peterson Dep. 10*.

206. The trend of industrial consumers away from coal is a continuing one. A recent fuel-use inquiry by the Chicago Department of Environmental Control, for example, revealed that, of the 9 responding manufacturing plants located within the City of Chicago which had earlier indicated in response to the Court ordered Subpoena Questionnaire that they were burning high sulphur coal, 6 have converted or will convert during the current year to use of gas and oil exclusively. Of the remaining 3, one indicated that it would be burning two-thirds more gas and oil and one-third less coal than in 1967, while the other 2 were switching from the use of high sulphur coal produced in Illinois to low sulphur coal from other areas. *DX 239.*

207. The evidence also demonstrates that many other midwestern industrial and institutional consumers are converting from coal to other fuels. Although defendants made no general attempt at trial to enumerate all such midwest conversions, numerous specific examples are found in the record. The facilities of American Distilling, Corn Products and Standard Brands in Pekin, Illinois; Hiram Walker and Keystone Steel in Peoria, Illinois; American Can in Green Bay; Northwestern States Cement in Mason City, Iowa; McDonnell-Douglas and Proctor & Gamble in St. Louis; American Maize in Roby, Indiana; the University of Chicago, the Metropolitan Sanitary District of Chicago, the City of Belleville, Belleville School District and St. Clair County, as well as the Government's own midwest facilities, for example, were shown to have discontinued recently the use of coal. *Davis Tr. 690, 698-699; Redard Dep. 6-7; Morrison Dep. 9; Steele Tr. 1003; Sant Stip. 1-2; Hemminger Stip. 1-2; Nugent Tr. 1928; DX 224; Stiehl Dep. 15; Middleton Dep. Ex. 5.*

208. Even the Courthouse in which this lawsuit was tried was shown to have been converted recently from coal to a combination of gas and oil. The evidence reveals, moreover, that the Government considers a careful economic appraisal of the relative merits of gas, oil, coal and other alternative fuels so important and common in its fuel purchasing decisions that the General Services

Administration has prepared a standard form—GSA Form 1289, Heating Fuel Economic Analysis—to assist in the process. *Nix Dep. 16; Brazzale Dep. 5-8; Brazzale Dep. Ex. 1.*

209. While environmental considerations play an important part in some decisions to convert from coal to other fuels, many are based on other economic grounds. *Redard Dep. 7-9; DX 36, 67, 75.*

210. The competition which coal faces for the business of industrial energy consumers will increase in the future, particularly in light of the relatively low cost of converting from coal to other fuels and the vigorous promotional activities of oil and gas companies in this area. *Walker Dep. 12; Peterson Dep. 12; DX 187-90, 191-92, 194-214.*

Utility Consumers

211. Oil and gas are also important competitors for the fuel requirements of midwest utilities. In some midwest states, for example, oil and gas already supply 50 percent of the energy requirements of electrical utilities.* *DX 138, pp. 20, 24.* As a report to the Federal Power Commission by a group of midwest utility executives points out, "Although coal is available in sufficient quantities in the West Central Region to supply the entire energy requirements of electric utilities in this region, competition will determine the extent to which coal will penetrate each market." *DX 257, p. 11-9.*

212. While the Subpoena Questionnaire was addressed only to the coal-fired facilities of midwest utilities, it revealed that, even with respect to these, 55 percent were capable of burning gas and/or oil as alternatives to coal. Furthermore, 79 percent of the utility facilities equipped to consume gas actually did so for six months or more during 1967. Installation of multi-fuel capability is not

* Significantly, the only utility executive called to testify by the Government, Daric N. Miller, Manager of Electric Production, Kansas Power and Light Company, was from an area where 91 percent of the fuel requirements of utilities are supplied by gas, eight percent by oil and one percent by coal. *Miller Tr. 1723; DX 138, p. 20.*

confined to small generating plants. This may be seen from the fact that the facilities with multi-fuel capability consumed close to 50 percent of the coal shipped to large utility systems in the midwest. *DX 59, Tables C, D.*

213. Because of growing concern with air pollution, oil and gas are rapidly increasing their share of the fuel business of midwest utilities—even among those which, because of their close proximity to coal fields, have relied principally on coal to provide their generation in the past. Illinois' largest coal consumer, Commonwealth Edison, for example, which ten years ago had 58 coal-fired boilers in Chicago, today has less than a dozen. *DX 92, p. 2; see also Findings 246-82.*

214. Also leading to increased usage of gas and oil by midwest utilities is the fact that many utilities are increasing their capacity through installation of gas and oil peaking units.* *DX 138, Table 6, pp. 73-86; DX 234, p. 4; Wood Tr. 600-02; Abrahamson Dep. 14-15; Nicosin Dep. 35-36; Gaunt Dep. 23-24.*

215. The capacity which these peaking stations represent has increased substantially in recent years. For example, the most recently announced gas turbine peaking station of Northern States Power Company has a capacity of 300,000 kilowatts. This exceeds the average size of the coal-fired base-load units being installed only five years ago. *Compare Wood Tr. 664 with DX 86, Table following p. 9.*

216. Such peaking units represent a significant portion of the new capacity being installed by utilities in the midwest. *DX 138, Table 6, pp. 73-86; DX 234, p. 4.* Thus, the combined capacity of Northern States Power Company's gas and oil peaking stations (500,000 kilowatts) is equivalent to a coal-fired station consuming approximately one million tons of coal annually. *Wood Tr. 602; Gamble Tr. 1248-49.*

217. As the demand for electricity increases, greater use is made of the capacity at gas and oil peaking stations. *Wood Tr. 617.*

* "Peaking units" are generating facilities put in operation during periods of high electricity consumption. *See Abrahamson Dep. 38-39.*

218. It is only a present limitation on the availability of gas and oil which prevents these fuels from winning an even larger portion of the utility market from coal. There is an abundance of evidence in the record, however, indicating that many steps are being taken to increase the supply of these fuels in the midwest. *DX* 137, 162-70, 193, 198, 238; *Netschert Dep.* 22-24; *Peterson Dep.* 57; *Walker Dep.* 20-23; *Gamble Tr.* 1255-60. In light of this, midwest gas companies continue to stress their ability to offer "plenty of low-cost natural gas." *DX* 197; see also *DX* 195-96. As one of its own exhibits points out, the fault for any present shortage of supply is largely the Government's. *GX* 247; see also *Walker Dep.* 53, 57.

219. In the utility market, coal is also faced with a secondary level of competition from alternate fuels. The growth in demand for electricity which has occurred in recent years is not due to increased demand for illumination—where electricity is faced with virtually no competition. Rather, it is due to expansion of the use of electricity for home heating, air conditioning and appliances—areas where the electricity which coal generates encounters severe competition from oil and gas. *Peterson Dep.* 12-13, 17-22, 50; *Walker Dep.* 10-11; *Tomey Tr.* 342; *Schotters Dep.* 13-14; *Nicosin Dep.* 62-63; *Steele Tr.* 1001-03; *DX* 189, 210-12.

220. Competition at the secondary level has become particularly intense in recent years with the development of the "total energy" concept where gas and oil are used not only to provide energy for heating, air conditioning and appliances, but for on-site generation of electricity as well. *DX* 85, pp. 1-2; *DX* 85, Table XII; *DX* 198-210, 213-14; *Tomey Tr.* 342; *Netschert Dep.* 44-46; *Peterson Dep.* 21.

Competition from Nuclear Energy

221. During the 1960's, the use of nuclear energy to generate electricity became a commercial reality, increasing still further the competition faced by coal. Thus, as of January 1970, there were sixteen nuclear plants

in operation, 48 more under construction, and an additional 41 had been announced. *DX-108.*

222. Midwest utilities have assumed a position of leadership in the development of nuclear powered generating stations. Commonwealth Edison, for example, was a pioneer in the field, and in 1960 opened the first privately financed nuclear generating station in the country. *DX 99.* Today, Edison and TVA, the midwest's two largest coal consumers, account for approximately 20 percent of the nation's private nuclear capacity on order, under construction or in service. *Corey Tr. 1589.*

223. TVA already has five nuclear units under construction which, when completed, will represent approximately 25 per cent of TVA's generating capacity. *Hill Tr. 1075-77.* At the close of 1970, Commonwealth Edison will have three nuclear units in operation. By 1973, the number will have more than doubled and some 40 per cent of its electric generating capacity will be nuclear. Beyond that, Edison already has plans for two more nuclear units to come on stream in 1976 or 1977. In total, these nuclear generators will have a kilowatt capacity equivalent to coal-fired stations consuming 20 million tons of coal annually. *Corey Tr. 1585-88; DX 92, 97, 98.* As Commonwealth Edison's spokesman at trial summed it up:

"Well, as far as Commonwealth Edison is concerned, we have sort of put our eggs in the nuclear basket. We believe that nuclear power is the best way to provide base load electric generation, and we intend to move in this direction." *Corey Tr. 1600.*

224. Other utilities throughout the midwest are also committing themselves to nuclear energy. Northern States Power Company's first nuclear station becomes operational this year and will be joined by two others in 1972 and 1974, representing a total nuclear capacity of more than 1,600,000 kilowatts. *Wood Tr. 602-03.* Three Wisconsin utilities, Wisconsin Public Service Company, Wisconsin Power and Light Company, and Madison Gas and Electric Company have joined together to construct a large nuclear station which is scheduled to begin operations by 1972. *Abrahamson Dep. 21-22, 28;*

Morrison Dep. 10-11; *DX* 107; *Abrahamson Dep. Ex.* 1, 1A. Northern Indiana Public Service Company, Iowa Electric Light and Power Company, and Wisconsin Electric Power Company have also undertaken substantial commitments to nuclear energy. *DX* 108. Dairyland Cooperative Company already operates a small nuclear demonstration plant and plans to join with four other rural cooperatives in the construction of an additional 500,000 kilowatts nuclear station. *Moser Tr.* 1509, 1573-74.

225. Even those midwest utilities which have not already gone to nuclear energy emphasized their continuing interest in, and financial support of, nuclear research and development, and the possibility that they might undertake nuclear commitments in the future. They stressed that even now they closely compare and evaluate the overall costs of nuclear and fossil fuel stations in all cases before making a decision as to which type of new generating capacity to install. *Tomey Tr.* 326-29; *Steele Tr.* 936, 940; *Davis Tr.* 694; *Nicosin Dep.* 46-48; *Schotters Dep.* 10-11, 39; *Ward Dep.* 28, 51; *DX* 146, p. 8; *DX* 147, p. 13; *DX* 148, p. 6.

226. Even apart from environmental considerations, nuclear energy in the 1960's rapidly developed to the point where it was cost competitive with coal. In 1968, when TVA was planning a 3,300,000 kilowatt increase in its capacity, it carefully compared and evaluated both coal and nuclear fueled facilities and concluded that installation of a nuclear station "would be a decided economic choice over a coal-fired plant." *DX* 103, p. 15; see also *DX* 103, Table 1, p. 4; *Corey Tr.* 1600; *Moser Tr.* 1573-74.

227. The Atomic Energy Commission has considered nuclear energy to be a competitor of coal for the fuel requirements of electrical utilities—even in coal mining areas—since approximately 1965. *Tremel Tr.* 787-89, 800. As the director of the AEC Division of Industrial Participation explained at trial, fuel costs for a nuclear plant are "considerably cheaper than a fossil plant, and although the capital cost is higher, when you balance the total cost, this is why the utilities have gone to

nuclear, because the total operating cost will tend to be lower in many cases due to the cheaper fuel costs." *Tremmel Tr.* 799.

228. The competition which coal faces from nuclear energy will become even more intense in the future. The Atomic Energy Commission has estimated that by 1980 between 20 and 25 percent of the nation's total generating capacity will be nuclear. Moreover, since these nuclear stations will be base-load facilities* which are more fully utilized than older fossil units, the AEC has also predicted that between 30 and 35 percent of the electricity actually generated in 1980 will be nuclear fueled. *Tremmel Tr.* 800-98; see also *Gerber Dep.* 53-54.

229. The impact of increased installation of nuclear generating stations on coal will be particularly severe in the midwest, where utility executives have reported to the Federal Power Commission that by 1990 nuclear facilities are anticipated to comprise 57 percent of total capacity—with nuclear generation "expected to supply nearly 70 percent of the region's energy requirements by that time." *DX* 257, p. S-5.

230. During the 1980's, when the so-called nuclear breeder reactor is expected to come into commercial use, coal's portion of the fuel business of utilities is likely to decrease further, with the possibility that it may ultimately be eliminated altogether. *Tremmel Tr.* 806-08; *Netschert Dep.* 38.

231. The most significant advantage of the breeder reactor over the present generation of nuclear generating facilities is that the breeder reactor will actually make more fuel (which can be used or sold) than it consumes—resulting in a "negative" fuel cost. *Gamble Tr.* 1249-50; *Tremmel Tr.* 806-07; *Netschert Dep.* 39.

232. While there are substantial economies of scale in the construction and operation of nuclear facilities, this does not preclude the use of nuclear energy by the small utilities in the midwest. *Tremmel Tr.* 791-92; *Steele Tr.* 963. On the contrary, several smaller utilities have already undertaken the joint construction of large scale

* That is, operated continually.

nuclear facilities. *Abrahamson Dep.* 19-20, 28; *Morrison Dep.* 10-11; *Moser Tr.* 1573-74; *Steele Tr.* 963.

233. Midwest utilities, moreover, are already joining together in power pools such as MAPP (Mid-Continent Power Planners) and MAIN (Mid-American Interpool Network) so that, among other things, such joint nuclear projects can be even more readily undertaken and efficiently coordinated in the future. *DX* 232, 233; *DX* 257, pp. IV-1-IV-11; *Wood Tr.* 683-85. Furthermore, companies with developed expertise and operating experience with nuclear energy such as Commonwealth Edison are available to lend technical assistance, and possibly supplies, to those undertaking nuclear commitments for the first time. *GX* 135; *Corey Tr.* 1978-79.

234. A utility that has constructed one nuclear fueled generating station is very likely to add another, so as to gain the most benefit from the nuclear experience already gained and the highly skilled nuclear personnel already employed. *Wood Tr.* 670; *Gamble Dep.* 24.

235. There was tremendous success in 1969 in finding low cost uranium, and the Government has a variety of tools at its disposal to assure that further development of nuclear energy to generate electricity is not adversely affected by nuclear fuel costs or availability. Moreover, successful development of the breeder reactor will remove all concern about nuclear fuel availability. *Wood Tr.* 676-77; *GX* 118; *Gamble Tr.* 1249-55; *Netschert Dep.* 97.

236. Quite apart from the utility market, nuclear energy has now developed to the point where its use as an alternative to coal for industrial facilities is already occurring, and can be expected to expand in the future as further technological advancements are made. *Tremmel Tr.* 812-813.

Other Alternate Power Sources

237. Hydropower has long been a competitor of coal in the midwest. TVA, the midwest's largest coal consumer, originally used hydropower exclusively, and today operates approximately 40 hydropower stations. *Hill Tr.* 1073-74; see also *DX* 102, p. 283. Coal's competition in the midwest from this source of energy is expected

to increase in the future in view of steps being undertaken to integrate the huge hydroelectric potential in Canada with power developments in the midwest through power pooling arrangements. *DX 232; DX 257, p. S-5.*

238. Pumped storage hydroelectric projects will further increase the competitive pressure on coal. At a pumped storage facility, water is pumped into an elevated reservoir by energy generated at the most economical base-load station during off-peak hours. During periods of peak demand, the cycle is reversed and the water runs down from the facility through hydroelectric turbines to generate power. *DX 90, pp. 9-10; DX 223; Netschert Dep. 43-44.* As pumped storage facilities are brought on line, older coal-fired stations can be retired. *DX 176.*

239. There is a growing commitment to pumped-storage power generation in the midwest. *DX 90, pp. 9-10; DX 175, 177, 223; see also DX 85, Table XIII.* Pumped storage facilities tie in well with nuclear generation, and an Atomic Energy Commission spokesman predicted at trial that, in the long term, electricity could be generated at the lowest cost by a combination of nuclear energy, pumped storage, and gas peaking. *DX 90, p. 9; Tremmel Tr. 810.*

240. Another alternative to coal expected to add to interfuel competition in the future is the generation of electricity by geothermal steam. In this method of generation, underground steam is tapped directly to provide power to drive turbine generators. While the installation of such facilities has thus far been confined to the west coast, some scientists estimate that by 1980 geothermal energy could be generating as much as ten percent of the total electrical output of the country. *DX 178, 179.* More immediately, increasing geothermal capacity on the west coast will free gas, presently required there for the generation of electricity, for use in the midwest. *Walker Dep. 23.*

241. Furthermore, other substantial research efforts are underway in the energy field that will no doubt increase the future level of interfuel competition. *DX 102, pp. 295-98; DX 180.*

Multi-Energy Companies

242. An additional aspect of the competition coal faces from other fuels is the fact that coal producers such as United Electric frequently find themselves competing with much larger corporate enterprises which produce and sell a variety of energy sources and can thus fill all of a utilities fuel needs, regardless of kind. In the past six years, the oil industry has established itself as a major element in coal production, linking under common ownership, in many instances, the energy resources of coal, oil, gas, uranium, oil shale and tar sands. *DX 85, p. 5; DX 85, Table XXVIII.*

243. Four midwestern coal producers are owned by oil companies: Pittsburg and Midway Coal Co. (Gulf Oil), Consolidation Coal Co. (Continental Oil Co.), Island Creek Coal Co. (Occidental Petroleum Corp.) and Old Ben Coal Co. (Standard Oil Co. of Ohio). In 1967, these companies accounted for more than 25 percent of the coal produced in Illinois, Indiana and West Kentucky. *DX 85, Table XXVIII; GX 85.*

244. A fifth midwestern coal producer, Ayrshire Collieries Corp., had announced plans in early 1969 to merge with Ashland Oil & Refining Co. The merger discussions were terminated, however, and Ayrshire subsequently combined with American Metal Climax, Inc., a major producer, fabricator and marketer of metals and minerals. *DX 184-86; Hopper Tr. 1864.*

245. Humble Oil, the principal operating subsidiary of Standard Oil (New Jersey) is constructing a deep mine in Illinois capable of producing three million tons per year for 20 to 30 years. Humble has entered into a long-term contract to sell the mine's output to Commonwealth Edison Company. Humble controls deep coal reserves in the midwest estimated at three billion tons. *Shipley Stip., pp. 1-3; DX 61; Nugent Dep. Ex. 38.* In addition to its sale of oil, natural gas and coal, Humble also has extensive holdings of uranium. *DX 81, pp. 6-8.*

B. AIR POLLUTION RESTRICTIONS WILL INTENSIFY THE COMPETITION COAL FACES FROM OTHER FUELS.

Enactment of Air Pollution Laws

246. Air pollution has become one of the nation's most difficult and urgent problems. *DX 234, p. 6; DX 90, p. 2; DX 254, p. 1.*

247. The burning of coal results in the emission of particulate matter and sulphur oxides. Significantly, these were the first two emissions to be designated as pollutants by the National Air Pollution Control Administration. *Middleton Dep. 18; DX 254, p. 1; DX 151; see also Moore Dep. 17-18.*

248. Beginning in 1955, the United States Department of Health, Education and Welfare undertook to study the effect of sulfur oxide and particulate emissions on health. Such study led the Department to conclude that these pollutants represented a serious health hazard when they exceeded certain levels in the atmosphere. The Department subsequently published the results of its studies, stressing particularly what it believed to be the minimum air quality standards for safety with respect to these pollutants. *DX 89, pp. 1-3; Middleton Dep. Ex. 1, 3.*

249. As a result of widespread concern over the deleterious effects of these pollutants, tremendous public pressure developed for the enactment of pollution control legislation and regulations to curtail their emission into the atmosphere. *DX 71, p. 2; DX 136, 151-57.* Even before such restrictions became effective in many areas, demands were made that utilities reduce their consumption of high-sulfur coal by substituting low-sulphur fuels. One citizen's group in Chicago, for example, placed a full page newspaper ad in July, 1969, under the banner headline "Caution: Commonwealth Edison is hazardous to your health." *DX 136.*

250. The result has been enactment of extensive air pollution abatement laws and regulations at the federal, state and local level. *DX 89, p. 2-24; DX 139-43, 152; Stanley Dep. 4-5; Moore Dep. 4-7; Middleton Dep. 5-6.*

251. While attention was focused at the outset on es-

tablishment of air pollution restrictions in major metropolitan areas, smaller communities have also begun to adopt air pollution regulations, and statewide regulation, where not already established, is anticipated. *DX* 89, pp. 2-24; *DX* 141, 143; *Moore Dep.* 13; *Moser Tr.* 1519; *Schotters Dep.* 30; *Netschert Dep.* 68-69; 74-75; *Griswold Dep.* 240-41. As defendants' expert witness on air pollution, S. Smith Griswold * testified:

"I believe that you are going to have state-wide regulations similar to those in New Jersey, generally. If you don't have a state-wide regulation, you are going to have industries moving out into the rural areas, the less urbanized areas, and subsequent dislocation of your industrial developments. I feel that this probably won't be acceptable from the standpoint of the area that is losing industry because of the severity of [air pollution] controls, plus the fact that you will see a wide range of local regulations designed to keep areas, which are now clean, from being polluted. *Griswold Dep.* 240.

252. In light of this regulatory trend, electric utilities and other large coal consumers will not be able to avoid air pollution restrictions by locating future facilities in rural areas. Indeed, much of the demand for statewide controls is from residents of rural areas who do not wish to see their present relatively pollution-free environment deteriorate. *Griswold Dep.* 241; *Moser Tr.* 1517-20; *Netschert Dep.* 68. As the representative of one rural electrification cooperative testified at trial, the people in rural areas "feel that they have clean air now and they intend to keep it that way." *Moser Tr.* 1520; *Schotters Dep.* 30-31.

253. As air pollution regulations become more widespread they also tend to become more stringent. *Netschert Dep.* 74-75; *Griswold Dep.* 40, 151-52, 220-21; *DX* 85, p. 2.

* Mr. Griswold was formerly Assistant Director of the National Air Pollution Control Administration of the U. S. Department of Health, Education and Welfare, and for eleven years the Air Pollution Control Officer of the Los Angeles County Air Pollution Control District. See *Finding* 39, *supra*.

Abatement Techniques and Their Effect on Coal

254. The air pollution restrictions being adopted throughout the midwest are substantially increasing the already intense competition which coal faces from other fuels. Only coal burning leads to particulate emission. Similarly, while coal is the principal source of sulphur oxide pollution, gas and oil burning result in only negligible sulphur oxide emissions, and nuclear energy, of course, leads to none. *Tremmel Tr.* 803-04; *Peterson Dep.* 26, 28-39, 48; *Walker Dep.* 23-25; *DX* 89, pp. 26-31.

Precipitators

255. While electrostatic precipitators have been developed which are effective in controlling the particulate portion of the pollution emitted during the burning of coal, many consumers have found it more economical to convert to alternate fuels—or even to close down older facilities—rather than to install such devices in order to continue burning coal. *Steele Tr.* 935-36; *Davis Tr.* 689-91; *Tomey Tr.* 400-01; *Redard Dep.* 8; *DX* 160.

256. This is because electrostatic precipitators are extremely high cost items of capital equipment. *Tomey Tr.* 401. The installation of such equipment can cost 2 million dollars or more at a single facility. *Wood Tr.* 668; see also *Corey Tr.* 1639; *Schotters Dep.* 15; *DX* 234, p. 6.

257. Because of this high cost, electrostatic precipitators are not practical for small coal burning facilities. This has been recognized by the National Air Pollution Control Administration. *Middleton Dep. Ex.* 4, p. 3-19; see also *DX* 160.

258. Even for utilities, however, the cost of such equipment often represents such a high investment that it is more economical to convert from coal to the use of oil or gas. At the 359,000 kilowatt R. S. Wallace Station of Central Illinois Light Company, for example, six of the ten boilers were converted to gas because, as the president of the company testified at trial, "We cannot put electrostatic precipitators on these boilers economic-

ally." *Davis Tr.* 690-91. Similarly, the president of Interstate Power Company testified that his utility expected to discontinue the burning of coal at its Fox Lake Station altogether. He explained that rather than put in a \$1,400,000 electronic or electrostatic precipitator, "we will probably change over to burning oil." *Steel Tr.* 935-36; *see also Tomey Tr.* 400-01.

Sulphur Oxide Control Devices

259. While equipment is at least available for reducing particulate emissions, the technology for controlling sulphur oxides, the other principal pollutant emitted during the combustion of coal, is still under development. *DX* 234, p. 6; *DX* 254, p. 42; *Tomey Tr.* 358; *Moser Tr.* 1524; *Schotters Dep.* 15.

260. The significance of air pollution restrictions on interfuel competition and the marketing of coal is underscored by the fact that three of the Government's five rebuttal witnesses were called to testify regarding sulphur oxide pollution control devices. *Miller Tr.* 1723 ff.; *Craig Tr.* 2034 ff.; *Quig Tr.* 2172 ff.

261. The most that witnesses Craig and Quig would say, however, was that they believed their respective companies would be able to develop commercially acceptable sulphur removal devices within five years. *Craig Tr.* 2068; *Quig Tr.* 2201. Mr. Quig's company, however, has not even built a prototype facility. Mr. Craig's company has built such a model, but they have not been able to get it to work more than 20 percent of the time. *Quig Tr.* 2185; *Craig Tr.* 2062. Both witnesses conceded that their devices would be quite costly, and that not a single utility had been persuaded to install one. *Quig Tr.* 2178, 2191; *Craig Tr.* 2043-44, 2051, 2053, 2075-76. In the end, Mr. Quig admitted that sulphur dioxide recovery is "still elusive" and that utilities "may very well turn towards the use of substitute fuels." * *Quig Tr.* 2191, 2198.

* The Government has not seen fit to order any such devices in connection with the air pollution reduction program at its own facilities. Instead it has converted to lower sulphur fuels. *Griswold Dep.* 221-26; *Griswold Dep. Ex.* 3, 4.

262. Daric N. Miller, an executive of Kansas Power and Light Company, testified with respect to his company's decision to place the nation's first order for equipment on a base-load station—a sulphur pollution control device designed by Combustion Engineering Company. *Miller Tr.* 1732, 1783. Although he admitted that his company had encountered problems from the day it started up a smaller demonstration model of the device, Mr. Miller expressed the belief that the equipment would be reliable. *Miller Tr.* 1736-37. Mr. Miller stressed that his company's facility would not be operating on coal produced in Illinois, Indiana or West Kentucky. He also noted the importance of recognizing that the Combustion Engineering system was one "you have to engineer and design to a specific environment of plant." *Miller Tr.* 1727, 1776, 1780. He was unable to answer the question of whether the device would work elsewhere. *Miller Tr.* 1780.

263. The Combustion Engineering device *has been tested* on coal produced locally, however, by Union Electric Company at its Meramec Station near St. Louis. *DX* 89, p. 45. An executive from Union Electric Company testified that the device was "not commercially operable" and was, in fact, "shut down for more design changes" when he left St. Louis to appear at trial. *Tomey Tr.* 358, 400. The device was, in fact, operable for only one of the first nine months following its installation. *Griswold Dep.* 87; *DX* 89, p. 46; *Griswold Dep. Ex.* 5, pp. 2, 9-10. As Mr. Griswold summed up the situation: "They have corrosion problems, they have every kind of problem. They have got so many problems they didn't think about, that they haven't gotten around, in some cases, to figuring out what the answers are to things they planned to determine in this study." *Griswold Dep.* 87-88; *Miller Tr.* 1779-80; *see also Griswold Dep. Ex.* 5, pp. 9-10.

264. Recognizing the magnitude of the problems encountered with the Combustion Engineering system to date, other midwest utilities have rejected it. Combustion Engineering's representatives have publicly stated that "the system cannot be considered commercially acceptable at this time," and a Federal panel of air pol-

lution technology experts, like the experts retained by defendants, has concluded that even the system's presently known problems "may require several years of additional study." *Nicosin Dep.* 49-50; *Schotters Dep.* 15; *Griswold Dep. Ex. 5*, p. 10; *DX 254*, p. 58; *DX 89*, pp. 42-49. As a spokesman from Union Electric put it: "It's strictly an experimental unit." *Tomney Tr.* 400.

265. Recently, the National Air Pollution Control Administration of the United States Department of Health, Education and Welfare, commissioned a panel of technical experts to review the status of United States and foreign sulphur oxide abatement and control processes in order to provide a basis for increased governmental and public understanding of the problems involved in these areas. On the basis of its independent evaluation of oral and written presentations by 46 companies—including the three from whom representatives were called by the Government at trial—the panel

"firmly concluded that, contrary to widely held belief, commercially proven technology for control of sulfur oxides from combustion processes does not exist." *DX 254*, p. 3 (*emphasis in original*); see also *DX 254*, pp. iii-iv, 63-64; *GX 210*, p. 45, paragraph 12.

266. It is impossible to predict precisely when effective sulphur oxide pollution control devices will become commercially available. While witnesses expressed the hope that it would be soon, it may be ten years or more before such processes are refined to the point where they are generally available for installation on, or planning for, power plants burning coal. *Griswold Dep.* 54-55. Although there is a great deal of research taking place with respect to sulphur oxide pollution control technology, it is important to recognize that as long as 20 years may be required to go from paper studies through laboratory bench experiments, pilot plants, prototype plants, and commercial demonstration to commercial application. *DX 89*, p. 38.

267. As the recent study for the National Air Pollution Control Administration emphasized, "efforts to force

the broad-scale installation of unproven processes would be unwise; the operating risks are too great to justify such action, and there is a real danger that such efforts would, in the end, delay effective sulphur oxide emission control." Instead, the study urged a high level of government support for several years to encourage research, engineering, development, and demonstration of a variety of the more promising processes, as may be suited to specific local and regional conditions. *DX 254*, p. 3.

268. In any event, there will be a long delay between the time sulphur oxide control devices become commercially proven and their actual implementation. *Moore Dep. 23*. Five years or more of advance planning are required in the construction of a modern utility generating station. *Wood Tr. 621-22*; *Tomey Tr. 359-60, 407-08*. Government counsel asked one utility executive whether, for a new plant being designed to burn low-sulphur coal from Montana or Wyoming, his company would consider using high-sulphur coal produced locally if an effective sulphur oxide control system were developed. He explained the problem:

"Well, here we have a timing problem because you have to start designing boilers well in advance of the unit. For a 1976 unit, we will have to start next year in making some final design decisions, and so we will not have the time to wait until we are assured that an SO_x removal system would be available." *Wood Tr. 622*.

269. Adding to the competitive problems faced by coal, because of growing air pollution concern and regulation, is the fact that the control of particulate pollution and sulphur oxide pollution are negatively interrelated. In present particulate control technology, sulphur oxides are needed for ionization of the flue gases, so that equipment which reduces the sulphur oxide reduces the effectiveness of the particulate control equipment. *Moser Tr. 1530*; *Wood Tr. 665-66*; *Corey Tr. 1686*; *DX 254*, p. 44. In effect, as you solve one air pollution problem, you create another one. *Wood Tr. 666*; *GX 210*, p. 40.

270. Cost projections show that sulphur oxide pollution control equipment will be quite expensive in terms

both of initial capital cost and subsequent increased operating expenditures. *DX 89, Table 5, p. 43; Griswold Dep. 188-89; Craig Tr. 2043-44, 2051, Quig Tr. 2178; Miller Tr. 1769-72.* Such devices will be far more costly than particulate control equipment. *Wood Tr. 667.* In some cases, for example, the projected capital cost alone for installation of a single control device will exceed the total current \$15 million Federal budget for research on the control of sulphur oxides. *DX 89, Table 5, p. 43; Griswold Dep. 214-16.*

**The Expense and Experimental Nature of
Air Pollution Control Devices Will
Adversely Affect Coal Consumption**

271. The lack of commercially acceptable sulphur oxide control devices, coupled with the increasing adoption of stringent sulphur oxide air pollution restrictions, has led to a switch on the part of many fuel consumers away from coal. As Commonwealth Edison summed up the situation in its latest annual report: "The best way for us to reduce air pollution is to burn less coal." *DX 90, centerspread.*

272. By 1973 Commonwealth Edison will be burning 50 per cent less coal in Chicago than it did in 1967, and by 1975 Edison's coal-burn will be cut in half again. *DX 98.* Three years ago Edison's Ridgeland Station, for example, burned nearly 1,200,000 tons of coal; today it burns none, but has instead, been switched to oil. *Compare Commonwealth Edison Subpoena Questionnaire Response, Forms 150 with Corey Tr. 1632.* Similarly, while Edison's State Line Station near Hammond, Indiana, consumed close to 2 million tons of coal in 1967, more than two thirds of the plant's electrical output is now fired by natural gas. *Compare Commonwealth Edison Subpoena Questionnaire Response, Form 150 with Corey Tr. 1635.*

273. During 1969, the gas burned in Commonwealth Edison's plants in and near Chicago replaced nearly 1,700,000 tons of coal. *DX 92.* Currently, an additional 1,400,000 tons of coal are being replaced by oil. *Corey Tr. 1585; DX 90, centerspread; DX 162-63.* Low-sulphur

coal from Montana, Wyoming, and Colorado is also being tested as a possible substitute for still more of the high-sulphur local coal presently consumed by Edison, *DX 90, centerspread; DX 159; Corey Tr. 1594*. Finally, Edison has made a substantial commitment to the use of nuclear energy, particularly in its future generation plans. *DX 90, centerspread; DX 91-93; DX 95-100*. Gordon Corey, Chairman of Commonwealth Edison's Finance Committee, emphasized at trial that "we believe this is the best way to take care of our massive electric generation problems with a minimum of disturbance to the environment." *Corey Tr. 1600-01*.

274. Like Edison, Northern States Power used its latest annual report to advise its shareholders of the steps it is taking in the face of growing air pollution concern and regulation. The report notes the conversion, for example, of some of its plants from coal burning to gas and oil fuel, and stresses the company's commitment to nuclear energy:

By 1974, 35 percent of the company's total generating capability will be in nuclear units that do not produce dust or sulphur dioxide. By 1974 NSP will burn about 4 million less tons of coal annually than would have been required if coal burning units of comparable generating capacity had been built. That is a coal and sulphur dioxide reduction of 55 percent. *DX 149, p. 18; see also Wood Tr. 604-05*.

275. Other industry witnesses also noted the erosion of coal's competitive position because of the increasing concern over air pollution, and their expectation that the competition that coal faces from other fuels would increase even more in the future. As the president of one midwest utility put it: "We have always discussed every alternative fuel and looked at it, and we are doing so more in recent years because of air pollution." *Steele Tr. 956*. Indeed, as another utility executive testified, "Air pollution is getting to be the over-riding issue." *Tomey Tr. 397; see also Steele Tr. 940-41; Wood Tr. 604-05, 668; Davis Tr. 693, 712-713; Moser Tr. 1517-20; Corey Tr. 1602-05; Hill Tr. 1134; Gamble Tr. 1326; Schotters Dep.*

15-16; *Peterson Dep.* 10-14; *Morrison Dep.* 24-26; *Ward Dep.* 28; *Redard Dep.* 7-8; *Nicosin Dep.* 49; *DX* 71; *DX* 176, 178, 179, 187, 188, 191, 192; *DX* 234, pp. 6-7; *DX* 238, 239.

276. Coal producers also stressed the impact of air pollution regulation on coal consumption. *Beck Dep.* 9; *King Dep.* 17-18; *Stiehl Dep.* 13-14. The president of one coal company noted, for example, that immediately after the enactment of an air pollution ordinance in St. Louis, his company lost one of its major customers, because the company's coal had a higher sulphur content than permitted under the ordinance. *Beck Dep.* 9.

277. The capital and operating costs involved in air pollution controls are important economic factors which utilities will consider in determining what type of fuel to burn and what type of generating stations to construct for their system. *Wood Tr.* 668; *Corey Tr.* 1598. Such costs may well lead to the exclusion of coal from the competitive picture for some utilities in favor of other fuels. *Nugent Tr.* 1933-34. The impact of air pollution abatement measures on the consumption of various fuels by electric utilities was summed up by Dr. Bruce Netschert, defendant's economic and energy expert, as follows:

"Well, as I previously indicated, I think that the impact of the sulphur aspect of air pollution regulations is to place coal at a competitive disadvantage, and this stated otherwise would mean that there would be a tendency to turn to other fuels as a means of coping with such regulations—gas, oil and nuclear.

"To answer your question specifically, I would say that the net effect would be to tend toward an increase in the consumption of these other fuels at the expense of coal consumption." *Netschert Dep.* 69.

278. In light of the commercial unavailability of sulphur oxide pollution control equipment, many of the governmental restrictions adopted to date—particularly the more recent—have taken the form of a limitation on the amount of sulphur in fuel burned rather than a limitation

on the amount of sulphur oxide emissions. *DX 89, Table 2, p. 14; DX 89, pp. 13, 23; Griswold Dep. 147.* Furthermore, because of the time, expense, and difficulties in measuring emissions, practical enforcement of even the latter standards often takes the form of restricting the sulphur content in fuels burned. *DX 89, p. 23; DX 89, Figure 1, p. 15; Griswold Dep. 147-50.*

279. Coals whose sulphur content exceeds that proscribed by ordinance or statute cannot, of course, compete for the business of consumers located within the area of regulation. Because of its high sulphur content, for example, none of UEC's coal can be sold in Chicago.* *Compare DX 89, Table 2, p. 14 with Finding 77; see also Petersen Dep. 10-11; GX 210, p. 14.*

280. In light of existing and projected air pollution laws and the cost and experimental nature of air pollution control equipment, it is clear that over the next decade, air pollution limitations will have a serious impact upon coal's marketing patterns and its share of energy markets. Beyond that period, such limitations may well continue to constitute an important competitive handicap to coal's ability to compete with other energy sources. *DX 89, pp. 23-24, 61-63.*

C. SUMMARY

281. On the basis of the record as a whole with respect to interfuel competition and the impact of air pollution controls, Professor Steiner, accurately summarized what effect this will have on coal producers:

"I think that air pollution considerations are going to make more difficult coal's role in the future. It seems perfectly clear that we are suddenly taking very seriously the matter of air pollution, and that air pollution control regulations will be enforced and that the coal users will either have to find substitutes for coal, find ways of finding a low sulphur coal or will have to introduce techniques for eliminating

* UEC can not acquire low sulphur coal reserves in the midwest to overcome this bar. *GF § VII, ¶ 6 at p. 41; GX 210; see also Findings 398-427.*

the sulphur dioxide and other pollutants that come out. None of these, as I suggested earlier, is going to be costless, and by virtue of being costly they are going to make the marginal consideration, let us say, between nuclear and coal closer; for a facility that is not close today, it will be closer tomorrow in my view because of this factor.

"It is a disadvantage under which producers who have high sulphur coal reserves are going to overcome, if they want to sell their coal." *Steiner Tr.* 2250-51.

282. In sum, not only does this intense level of inter-fuel competition explain a great deal of what has happened in the coal industry and to its markets, but its recognition is necessary to any valid predictions concerning the coal industry's future. Further, because it provides utilities particularly with a strong bargaining weapon in the negotiations with coal producers, it exerts strong competitive pressure on the market in which coal producers sell their form of energy. The crucial relevancy of these pressures in any assessment of the competitive effect of the United Electric-Freeman combination cannot be denied. *Steiner Tr.* 2138-39, 2245-46; *Steiner Dep.* 320; *Steiner Dep. Ex. 2, paragraph 12.*

VIII. MIDWEST COAL DISTRIBUTION PATTERNS

A. TRANSPORTATION FACTORS DETERMINE WHERE COAL MINES CAN COMPETE

283. The cost of transporting coal can vary widely depending on the relative location of the supplying mine to the coal consuming facility. For example, while there may be no transportation element in the delivered price to the mine-mouth generating station, the transportation portion of the delivered price to a facility located a great distance from the mine or mines which supply it may exceed the price of the coal itself. *DX* 86, pp. 2, 6; *Gaunt Dep.* 8, 51; *Nicosin Dep.* 42, 64-65; *Beck Dep.* 7; *King Dep.* 15; *Schotters Dep.* 7. Compare, e. g., *Central Illinois Public Service Company Subpoena Ques-*

tionnaire Response, Form 150, with Wisconsin Public Service Company Subpoena Questionnaire Response, Form 150.

284. Because they are such an important factor in the delivered price of coal, transportation costs largely determine those facilities for whose business coal mines are able to compete and those mines to which coal consumers can practicably turn for supplies. *DX 86, pp. 2, 6; Steiner Dep. Ex. 2, paragraph 10; Steiner Dep. 218-19, 333-34; Steiner Tr. 2155-59; Nugent Dep. 117; Morris Dep. 304; Netschert Dep. 153; Schotters Dep. 7-8, 17; DX 85, Table XXIII.* As the president of one midwest coal producer put it, "coal sales follow transportation arteries and freight rates." *Beck Dep. 7.*

285. As the Government's brief points out, the cost of transporting coal may approach 30 percent to 40 percents of its delivered price, and is a "critical factor" influencing the choice of suppliers by coal consumers which can "effectively segregate" coal producers in one area from those in another. *Govt. Brief, pp. 11-12.*

Freight Rate Districts

286. The Interstate Commerce Commission has designated various coal producing areas within Illinois, Indiana and West Kentucky as Freight Rate Districts. *Admitted by plaintiff, DPTF 59; see also Ayrshire Collieries Corp. v. United States, 335 U.S. 573 (1949).*

287. In maps and statistical compilations used by midwest coal consumers and producers, mines located in Illinois, Indiana and West Kentucky have long been commonly grouped according to the Freight Rate Districts in which they are located. *Nugent Dep. Ex. 38; Weir Dep. Ex. 1; Terleke Dep. Ex. 2-11; DX 57; Kolbe Dep. Ex. 42, p. 2.*

288. Responses to the Subpoena Questionnaire sent to midwest coal consumers show that each Freight Rate District in the midwest serves a distinct and definable area. This was confirmed by the testimony of producers and consumers and the responses to the Government's own sales questionnaire to midwest coal producers. *DX 55, 56; Wood Tr. 606-07, 680; Steele Tr. 936-37; 1001;*

Moser Tr. 1510; *Tomey Tr.* 332-33; *Davis Tr.* 695-96, 702-04; *Hill Tr.* 1087-89, 1094, 1098, 1127; *Gaunt Dep.* 6-7; *Ward Dep.* 11-12, 27; *Redard Dep.* 11-12; *Schotters Dep.* 7-8, 17; *Morrison Dep.* 18-19; *Nicosin Dep.* 41-44, 64-65, 70-71; *Beck Dep.* 6-7, 38-39; *King Dep.* 15; *Stiehl Dep.* 7; *Beck Dep. Ex.* 1; *DX* 69, 76, 77, 230, 231.

B. COAL QUALITY CHARACTERISTICS ARE ALSO A DETERMINING FACTOR

289. Responses to the Subpoena Questionnaire sent to midwest coal producers show that each of the Freight Rate Districts in the midwest produce coal with different and distinct characteristics. This was confirmed by the testimony of producers and consumers. *DX* 51; see also *Morrison Dep.* 16-18; *Netschert Dep.* 85; *Tomey Tr.* 335; *Gaunt Dep.* 21-22; *Abrahamson Dep.* 8, 11; *Serwood Tr.* 1452, 1486; *Petersen Dep.* 8-10, 47-48; *DX* 235.

290. These differences in coal quality characteristics reinforce the rigidity of the coal marketing patterns created by transportation factors, since, in order to maximize efficiency, boilers are generally designed with specific references to the characteristics of the coal which is to be burned in them. *Gamble Tr.* 1261; *Gerber Dep.* 61-63; *Steele Tr.* 944; *Moser Tr.* 1540; *Ward Dep.* 18-19; *Gaunt Dep.* 19-20; *Schotters Dep.* 8; *Nicosin Dep.* 56; *Camicia Dep.* 130; *GX* 210, p. 32; see also *Findings* 170-71.

291. As modern generating facilities become larger and more sophisticated, the range of coals which they are able to utilize becomes narrower, thus tying these stations even more closely to the Freight Rate District for whose coal they were designed. *Moser Tr.* 1516; *Tomey Tr.* 335, 367; *Nicosin Dep.* 78; *Abrahamson Dep.* 47-50; *Steele Tr.* 937; *DX* 235.

292. The careful attention paid to boiler specifications by midwest coal consumers when purchasing coal for their facilities can be seen in responses to the Subpoena Questionnaire. Eighty six and one-half percent of the coal-burning facilities in the midwest buy only coal meeting certain specifications with respect to size. Similarly,

61.2 percent specify *sulphur content*; 68.2 percent specify *ash content*; 70.2 percent specify *moisture content*; 60.2 percent specify *ash fusion temperature*; 66.4 percent have *BTU value* specifications; 61.2 percent specify only *washed coal*; and 28.4 percent have additional specifications not specifically covered in the questionnaire. In all, only eight percent of the coal consuming facilities in the midwest appear to buy coal without regard to its specifications. *DX 53; but see Davis Tr. 697-98.*

293. Furthermore, once a boiler has been constructed, modification so that it will accept coals with specifications other than those on which it was originally designed to operate is not practical. Thus, 88.5 percent of the midwest coal consuming facilities responding to the Subpoena Questionnaire—including 96.4 percent of all utility facilities—reported that modification of their boilers to accept other coals would not be feasible. *DX 53; see also Nicosin Dep. 57; Ward Dep. 24-25; DX 158.*

294. Having designed their boilers to accommodate coals from the Freight Rate District most favorably situated from a transportation standpoint, consumers refrain from using coals from other areas except in emergency situations such as a river flooding, wildcat strike or the like. As the president of one midwest utility explained:

“As a public utility we are charged with furnishing 100 percent continuity of service, and we cannot experiment with any and every type of coal. We know what our boilers were designed for. We know that we have to stay within a close tolerance. For us to jeopardize our reliability by taking any and all coals would not be wise.” *Steele Tr. 944.*

The chief engineer of another midwest utility recounted the difficulties his company had experienced when it experimented with coal that did not meet design specifications of the company's boilers. The boiler had to be completely shut down in order to remove the slag that had formed inside: “The first attempt at this was done with jack hammers. However, this was not too effective. So, finally we used the jack hammers to drill holes and used

dynamite to blast the slag out. We estimated between 40 and 50 tons of slag accumulated in this boiler." *Moser Tr.* 1516; *see also Ward Dep.* 19-22, 23, 47; *Nicosin Dep.* 54-55, 57, 59; *Gaunt Dep.* 20; *Morrison Dep.* 23; *Tomey Tr.* 335; *Wood Tr.* 607-608; *Steele Tr.* 938; *Peterson Dep.* 34-35, 47; *DX* 158.

295. A knowledgeable government employee testified that the Government would never buy coal without regard to its characteristics for its own facilities. *Nix Dep.* 14-15; *see also Nix Dep. Ex.* 1. The Government's official solicitation form for coal bids specifically provides that "whenever the bidder's guaranteed analysis of coal offered or the latest Bureau of Mines analysis of the coal offered shows the offered coal not to be in conformance with the specifications set forth in this Invitation, the bidder's offer shall be rejected as being non-responsive." *Burton Dep. Ex.* 1, p. 6.

296. While the Government in this lawsuit claims that "coal is coal,"* the president of one midwest coal company aptly pointed out that "they don't want to buy it that way." He testified that, on the contrary, before the Government would even consider a producer's bid, it was required to "fill out a form about a mile long" showing that the offered coal met the facility's required specifications. *King Dep.* 8. As one utility executive put it, "coal is coal" is not an informative statement likely to be made by someone knowledgeable with respect to coal. *Nicosin Dep.* 50-51.

C. COMMONWEALTH EDISON COMPANY IS A UNIQUE COAL PURCHASER

297. The Commonwealth Edison Company, because of the number and capacity of its coal-fired electrical generating stations and the magnitude of its coal requirements, has, as is discussed below, a unique coal purchasing pattern.

* At a Pre-trial Conference before the Court on February 19, 1969, Government counsel stated: "Our position is that coal is coal. . . ." *Pre-trial Tr.* 6.

298. Commonwealth Edison Company annually consumes as much coal as the combined production of all the mines in both the Fulton-Peoria Freight Rate District and Springfield Freight Rate District, the two major Freight Rate Districts closest to its generating stations. During 1967, for example, while Commonwealth Edison consumed 18,102,000 tons of coal at its coal-fired stations, the Fulton-Peoria Freight Rate District and the Springfield Freight Rate District, produced, respectively, only 8,526,000 tons of coal and 9,741,000 tons of coal. *Compare DX 55, Table D-X with DX 54.*

299. Because of its substantial coal requirements and the location of its facilities, Edison must purchase coal from several Freight Rate Districts in Illinois. *Compare DX 55, Table D-X with DX 54; see also Corey Tr. 1651; Steiner Tr. 2219, 2423-24; GF § VI, ¶ C(8) at p. 25.*

300. Moreover, in order to minimize its overall transportation costs, Edison has a distribution pattern for the coal which it purchases that is quite distinct from that followed by other consumers. Consumers with facilities in Pekin, Illinois, for example, buy coal from the Fulton-Peoria Freight Rate District because of the transportation advantage which local producers enjoy over coal from the Springfield Freight Rate District. However, since Edison must buy coal from both Freight Rate Districts, it finds its overall transportation expenses can be minimized by shipping Springfield coal to Pekin and using Fulton-Peoria coal at its river stations. *Steiner Tr. 2425-27; Tarzy Dep. 94; Commonwealth Edison Subpoena Questionnaire Response, Form 150; Corn Products Subpoena Questionnaire Response, Form 150.*

301. In addition to its coal requirements, Commonwealth Edison also has the most extensive commitment to the use of nuclear energy for the generation of electricity of any electric utility in the world. *DX 96; see also Findings 222-23.*

302. Furthermore, Commonwealth Edison has undertaken an aggressive and accelerated air pollution control program which, among other things, will substantially increase the amount of nuclear energy, gas and oil used by Commonwealth Edison for the generation of electric-

ity. This program has resulted in and will continue to result in the closing of a number of coal burning facilities and will reduce the amount of coal consumed at others. *DX 90, centerspread; see also Findings 271-73.*

D. METROPOLITAN CHICAGO INTERSTATE AIR QUALITY CONTROL REGION IS ALSO A UNIQUE COAL MARKET

303. The federal Air Quality Act of 1967 establishes a comprehensive program for the designation of air quality control regions and for the enactment of air pollution regulations for such regions. One of the air quality control regions established pursuant to the Air Quality Act of 1967 is the Metropolitan Chicago Interstate Air Quality Control Region, also referred to as the Greater Chicago Air Quality Control Region. *Admitted by plaintiff, DPTF 85.*

304. Air pollution control regulations are in the process of being established within the Metropolitan Chicago Interstate Air Quality Control Region pursuant to the enactment provisions of the Air Quality Act of 1967. *Admitted by plaintiff, DPTF 86.*

305. The Metropolitan Chicago Interstate Air Quality Control Region consists of McHenry, Kane, Lake, Cook, DuPage and Will Counties in Illinois and Lake and Porter Counties in Indiana. *Admitted by plaintiff, DPTF 62A (i).*

306. The City of Chicago, by far the largest municipality within the Metropolitan Chicago Interstate Air Quality Control Region, has already enacted air pollution control regulations. *Admitted by plaintiff, DPTF 87.*

307. The air pollution control regulations adopted by the City of Chicago prohibit the burning in Chicago of fuels with a sulphur content of greater than 2.0 percent at the present, and 1.0 percent after August 31, 1972. *Chicago Municipal Code, Chapter 17, paragraph 17-2.5 (3), as amended, Journal of Proceedings, Chicago City Council, pp. 8483-89.* Similar regulations are anticipated for the rest of the Metropolitan Chicago Interstate Air Quality Control Region. *Corey Tr. 1655, 1670; Moore Dep. 13.*

308. The Chicago area, because it is a major transportation hub with direct railroad or water arteries to most of the Freight Rate Districts in the midwest, has been served in the past by producers in most midwest Freight Rate Districts. In no other significant industrial and population center in the midwest does this confluence of coal shipments from multiple Freight Rate Districts occur.* Because of existing and anticipated air pollution regulations, however, future competition will be limited to those producers of low sulphur coal in the Southern Illinois Freight Rate District and in the Murdock Freight Rate District. *Nugent Dep. Ex. 38; Weir Dep. Ex. 1; Steiner Tr. 2222; Stadell Dep. 36; DX 51.*

E. THE FREIGHT RATE DISTRICTS IN WHICH THE MINES OF UEC AND FREEMAN ARE LOCATED HAVE DISTINCT DISTRIBUTION PATTERNS.

309. All of the mines of UEC and Freeman are located in Freight Rate Districts in Illinois. The Cuba, Banner and Buckheart mines of UEC are located in the *Fulton-Peoria Freight Rate District*. The Fidelity mine of UEC is located in the *Belleville Freight Rate District*. The Crown Mine of Freeman is located in the *Springfield Freight Rate District*. The Orient Mines of Freeman are located in the *Southern Illinois Freight Rate District*. *Admitted by plaintiff, DPTF 62B.*

310. It is necessary to an accurate and realistic analysis of coal distribution patterns to consider purchases by *Commonwealth Edison* separately from those of other consumers. This is because of (1) the magnitude of Edi-

* See DX 55, Table D-P and DX 56, Table G-P. Thus, the results of both the Subpoena Questionnaire and the Government's Sales Questionnaire demonstrate that none of the following cities, for example, are served by such a multiplicity of Freight Rate Districts: Peoria, Moline, Rock Island, Davenport, (Tables G-1F, 2F; D-1F, 2F); Springfield, Decatur (Tables G-1S, 2S; D-1S, 2S); Minneapolis-St. Paul, Dubuque, St. Louis (Tables G-1B, 2B; D-1B, 2B); Paducah, Sheboygan, Green Bay, Waterloo, Cedar Rapids, Des Moines, Mason City, Milwaukee (Tables G-1So, 2So; D-1So, 2So). "G" Tables are found in DX 56, and "D" Tables in DX 55.

son's coal requirements (it is the largest coal purchaser in Illinois and the largest purchaser of coal from both UEC and Freeman); (2) the unique coal purchasing and distribution practices Edison has adopted to meet these requirements; (3) Edison's immense commitment to nuclear energy; and (4) the substantial impact on its fuel procurement policies which air pollution concern and regulation are already having. Combining Edison's coal purchases with those of other consumers would result in a significantly distorted picture of coal consumption and distribution practices with respect to both Edison and such consumers. *Steiner Tr.* 2218-20, 2325, 2376-77 and see *Findings* 297-302.

311. Because consumers in the *Metropolitan Chicago Interstate Air Quality Control Region* have historically been a unique coal market, because they presently face a common set of problems with respect to air pollution, and because past statistics with respect to coal consumption in this area are not a useful guide to either future coal consumption or use of alternate fuels in this area, it is also necessary to an accurate and realistic analysis of coal distribution patterns to consider purchases by consumers in this area separately from those of consumers in other areas. *Steiner Tr.* 2221-22; and see *Findings* 303-08.

312. In view of the differences in their coal purchasing practices—particularly, with respect to such matters as the size of their coal requirements and the length of their coal purchasing contracts—it is also helpful in analyzing coal distribution patterns to show separately purchases by utilities and purchases by non-utility consumers. *DX* 54, 58, 59.

313. As is detailed below, the results of the comprehensive survey of midwest coal consumers made pursuant to the Subpoena Questionnaire issued by the Court demonstrate that each of the Freight Rate Districts in Illinois in which the mines of Freeman or UEC are located serve distinct market areas. See also *Findings* 283-96.

Fulton-Peoria Freight Rate District

314. Coal mines located in the Fulton-Peoria Freight Rate District serve, in addition to Commonwealth Edison Company and coal consumers located in the Greater Chicago Air Quality Control Region, utility facilities located near or on the Illinois River between Meredosia and Ottawa, Illinois (the Fulton-Peoria Utility Sales Area), and non-utility facilities located in a pentagon between the Illinois River on the east from Meredosia north to Marseilles, the Mississippi River on the west between Muscatine and Clinton, Iowa, and Dixon, Illinois on the north (the Fulton-Peoria Non-utility Sales Area). *DX 55, 56.*

315. Producers and consumers confirmed that mines in the Fulton-Peoria Freight Rate District enjoyed a substantial transportation advantage with respect to the sales areas which they served. *Davis Tr. 696, 703; Redard Dep. 11-12; Sherwood Tr. 1453-54; King Dep. 15; Morris Tr. 206-07, 219; Nugent Tr. 1923-25; Tarzy Dep. 196-97, 301-02.* As the president of one coal producer whose mine was located in the Springfield Freight Rate District explained, mines local to Fulton-Peoria "had more advantageous transportation charges than we had. We had no chance to sell coal in the Peoria or Pekin" district. *Beck Dep. 6.* The natural advantage which Fulton-Peoria producers enjoy with respect to consumers in these sales areas is reinforced by the fact that the boilers of these consumers are generally designed specifically to operate on coal with the characteristics of that produced in the Fulton-Peoria Freight Rate District. *Davis Tr. 697; Redard Dep. 7-8.*

Consumption Statistics

316. In 1967, approximately 87% of the coal consumed by utilities in the Fulton-Peoria Utility Sales Area was produced by mines located in the Fulton-Peoria Freight Rate District. *Admitted by plaintiff, DPTF 65.*

317. In 1967, approximately 85% of the coal consumed by non-utilities located in the Fulton-Peoria Non-utility Sales Area was produced by mines located in the

Fulton-Peoria Freight Rate District. *Admitted by plaintiff, DPTF 67.*

Production Statistics

318. In 1967, of the coal produced in the Fulton-Peoria Freight Rate District which was sold to utilities, approximately 63% was sold to Commonwealth Edison Company, and the remaining 37% was sold to utilities in the Fulton-Peoria Utility Sales Area. *Admitted by plaintiff, DPTF 66.*

319. In 1967, of the coal produced in the Fulton-Peoria Freight Rate District which was sold to non-utilities, approximately 70% was sold to non-utilities located in the Greater Chicago Air Quality Control Region, approximately 24% was sold to non-utilities located in the Fulton-Peoria Non-Utility Sales Area, and approximately 6% was sold to non-utilities located in other areas. *Admitted by plaintiff, DPTF 68.*

320. In 1967, of the total coal produced in the Fulton-Peoria Freight Rate District, approximately 46% was sold to facilities located in the Fulton-Peoria Utility and Non-Utility sales areas, approximately 45% was sold to Commonwealth Edison Company, approximately 7% was sold to facilities located in the Greater Chicago Air Quality Control Region, and approximately 2% was sold to facilities located in other areas. *Admitted by plaintiff, DPTF. 64.*

Springfield Freight Rate District

321. Coal mines located in the Springfield Freight Rate District serve, in addition to Commonwealth Edison Company, utility facilities located within the Springfield Freight Rate District (the Springfield Utility Sales Area), and non-utility facilities located within the area in Illinois bordered by Springfield and Decatur on the north and Carlinville and Ramsey on the south (the Springfield Non-utility Sales Area). *DX 55, 56.*

322. With respect to consumers in these sales areas, mines located in the Springfield Freight Rate District enjoy a transportation advantage which acts as economic

barrier foreclosing competition from producers located in other Freight Rate Districts. *Beck Dep. 6; Davis Tr. 692-93; Morris Tr. 206-07; Nugent Tr. 1923-25.*

Consumption Statistics

323. In 1967, 100% of the coal consumed by utilities located in the Springfield Utility Sales Area was produced by mines located in the Springfield Freight Rate District. *Admitted by plaintiff, DPTF 70.*

324. In 1967, approximately 83% of the coal consumed by non-utilities located in the Springfield Non-utility Sales Area was produced by mines located in the Springfield Freight Rate District. *Admitted by plaintiff, DPTF 72.*

Production Statistics

325. In 1967, of the coal produced in the Springfield Freight Rate District which was sold to utilities, approximately 82% was sold to Commonwealth Edison Company, 16% was sold to utilities located in the Springfield Utility Sales Area, and 2% was sold to utilities located in other areas. *Admitted by plaintiff, DPTF 71.*

326. In 1967, of the coal produced in the Springfield Freight Rate District which was sold to non-utilities, approximately 93% was sold to non-utilities located in the Springfield Non-Utility Sales Area, and 7% was sold to non-utilities in other areas. *Admitted by plaintiff, DPTF 73.*

327. In 1967, of the total coal produced in the Springfield Freight Rate District, approximately 79% was sold to Commonwealth Edison Company, approximately 19% was sold to facilities located in the Springfield Utility and Non-utility sales areas, and approximately 2% was sold to facilities located in other areas. *Admitted by plaintiff, DPTF 69.*

Belleville Freight Rate District

328. Coal mines located in the Belleville Freight Rate District serve, in addition to Commonwealth Edison Company and coal consumers located in the Greater Chicago Air Quality Control Region, utility facilities located in East St. Louis, Illinois, St. Louis and Chamois, Missouri

and along the Mississippi River between Muscatine, Iowa, and Minneapolis-St. Paul (the Belleville Utility Sales Area), and non-utility facilities located in the Belleville Freight Rate District and in or near St. Louis, Missouri (the Belleville Non-utility Sales Area). *DX 55, 56.*

329. Mines located in the Belleville Freight Rate District enjoy a substantial transportation advantage with respect to consumers in these sales areas. Because of this, they have been the "natural source of coal" for these consumers, and mines in other Freight Rate Districts are not competitive with Belleville mines for the coal business of these consumers. *Moser Tr. 1510; Wood Tr. 606; Tomey Tr. 331; Steele Tr. 1001; Tarzy Dep. 305-06.* The natural transportation advantage which the Belleville Freight Rate District enjoys with respect to these sales areas has led consumers located there to design their facilities to operate on coal with the characteristics of that produced by mines in the Belleville Freight Rate District. Use of coals from other areas can lead to "severe" operating problems. *Steele Tr. 937; Wood Tr. 608; Tomey Tr. 335; Moser Tr. 1516, 1534.*

Consumption Statistics

330. In 1967, approximately 80% of the coal consumed by utilities located in the Belleville Utility Sales Area was produced by mines located in the Belleville Freight Rate District. *DPTF 75, admitted by plaintiff.*

331. In 1967, approximately 98% of the coal consumed by non-utilities located in the Belleville Non-utility Sales Area was produced by mines located in the Belleville Freight Rate District. *DPTF 77, admitted by plaintiff.*

Production Statistics

332. In 1967, of the coal produced in the Belleville Freight Rate District which was sold to utilities, approximately 45% was sold to utilities located in the Belleville Utility Sales Area, approximately 40% was sold to Commonwealth Edison Company, approximately 8% was sold to utilities located in the Greater Chicago

Air Quality Control Region, and approximately 7% was sold to utilities located in other areas. *DPTF 76, admitted by plaintiff.*

333. In 1967, of the total coal produced in the Belleville Freight Rate District which was sold to non-utilities, approximately 65% was sold to non-utilities located in the Belleville Non-Utility Sales Area, approximately 24% was sold to facilities located in the Greater Chicago Air Quality Control Region, and approximately 7% was sold to non-utilities located in other areas. *DPTF 78, admitted by plaintiff.*

334. In 1967, of the coal produced in the Belleville Freight Rate District, approximately 47% was sold to facilities located in the Belleville Utility and Non-Utility sales areas, approximately 36% was sold to Commonwealth Edison Company, approximately 10% was sold to facilities located in the Greater Chicago Air Quality Control Region, and approximately 7% was sold to facilities located in other areas. *DPTF 74, admitted by plaintiff.*

Southern Illinois Freight Rate District

335. Coal mines located in the Southern Illinois Freight Rate District serve, in addition to Commonwealth Edison Company and coal consumers located in the Greater Chicago Air Quality Control Region, utility facilities located in the southern-most portion of Illinois, on the Mississippi-Ohio Rivers between Grand Tower, Illinois on the west and Paducah, Kentucky on the east, in the inland portion of northeastern Missouri, in Iowa away from the Mississippi River, in the southern tier of counties in Minnesota away from the Mississippi River, and in a triangle in Wisconsin and the upper peninsula of Michigan formed by Kenosha, Wisconsin on the south, and Ashland, Wisconsin and Marquette, Michigan on the north (the Southern Illinois Utility Sales Area), and non-utility facilities located in the southernmost portion of Illinois, in southeastern, northeastern and north central Missouri, in Iowa away from the Mississippi River, in the southern tier of counties in Minnesota away from the Mississippi River and in a triangle in Wisconsin and the upper peninsula of Michigan formed by Kenosha,

Wisconsin on the south, and Ashland, Wisconsin and Marquette, Michigan on the north (the Southern Illinois Non-utility Sales Area). *DX* 55, 56.

336. Because of the extremely high BTU value of the coal produced in the Southern Illinois Freight Rate District, and the favorable train routes which mines located there enjoy with respect to the sales areas they serve, mines in the Fulton-Peoria, Springfield and Belleville Freight Rate Districts are unable to serve customers located in these sales areas on a competitive basis. *Hill Tr.* 1088, 1098, 1106; *Tomey Tr.* 332; *Morrison Dep.* 16, 18-19; *Abrahamson Dep.* 11; *King Dep.* 6-7; *Stiehl Dep.* 7; *Sherwood Tr.* 1453-54. Boilers designed to utilize high BTU coal from mines in the Southern Illinois Freight Rate District will not operate properly on coal from the Fulton-Peoria, Springfield, or Belleville Freight Rate Districts. *Petersen Dep.* 8-10, 34-36, 45-47; *Morrison Dep.* 16-19, 23; *Abrahamson Dep.* 8; *Nicosin Dep.* 59; *Morris Tr.* 506-09.

Consumption Statistics

337. In 1967, approximately 53% of the coal consumed by utilities located in the Southern Illinois Utility Sales Area was produced by mines located in the Southern Illinois Freight Rate District, and approximately 38% was produced by mines located in the West Kentucky Freight Rate District. *DPTF* 80, *admitted by plaintiff.*

338. In 1967, approximately 76% of the coal consumed by non-utilities located in the Southern Illinois Utility Sales Area was produced by mines located in the Southern Illinois Freight Rate District. *DPTF* 82, *admitted by plaintiff.*

Production Statistics

339. In 1967, of the coal produced in the Southern Illinois Freight Rate District which was sold to utilities, approximately 81% was sold to utilities located in the Southern Illinois Utility Sales Area, approximately 1% was sold to Commonwealth Edison Company, and approxi-

mately 17% was sold to utilities located in other areas. *Admitted by plaintiff, DPTF 81.*

340. In 1967, of the coal produced in the Southern Illinois Freight Rate District which was sold to non-utilities, approximately 55% was sold to non-utilities located in the Southern Illinois Non-Utility Sales Area, approximately 33% was sold to non-utilities located in the Greater Chicago Air Quality Control Region, and approximately 12% was sold to non-utilities located in other areas. *Admitted by plaintiff, DPTF 83.*

341. In 1967, of the total coal produced in the Southern Illinois Freight Rate District, approximately 75% was sold to facilities located in the Southern Illinois Utility and Non-utility sales areas, approximately 8% was sold to facilities located in the Greater Chicago Air Quality Control Region, and approximately 17% was sold to facilities located in other areas. *Admitted by plaintiff, DPTF 79.*

F. SUMMARY

342. In 1967, approximately 97 percent of the production in the Fulton-Peoria Freight Rate District, 100 percent of the production in the Springfield Freight Rate District, 98 percent of the production in the Belleville Freight Rate District and 85 percent of the production in the Southern Illinois Freight Rate District, was shipped to one or more of the market areas described in Findings 314 through 341. *Admitted by plaintiff, DPTF 84.* That is, *either* to Commonwealth Edison, the Chicago Air Quality Control Region or to the applicable Utility and Non-Utility Sales Areas.

343. The distinct distribution pattern of coal produced in each Freight Rate District and the distinct consumption pattern of consumers located in various sales areas detailed in Findings 314 through 341 establish beyond question that there is no mine that sells coal in either an Illinois or an Eastern Interior Coal Province Sales Area market and no consumer that purchases coal in either an Illinois or an Eastern Interior Coal Province Sales Area market. In light of this, it is clear that there is

neither an Illinois nor an "Eastern Interior Coal Province Sales Area" market. As the Government's economist testified, "you have to have the testimony from the people about the fact that they buy coal all over this area, etcetera, to justify saying this is an economic market." *Folsom Tr.* 2608. Thus, Professor Steiner observed, when asked to what conclusions the Subpoena Questionnaire response data with respect to coal distribution patterns led him:

"Let me start with a couple of negative conclusions. It seems quite clear looking at that graph as well as the data that underlies it, that the talk of Illinois as a relevant market in which to appraise that merger makes very little sense, just in terms of where the coal from the areas in which those companies produce goes.

"Second, it seems to make relatively little sense to talk of that area that was defined as the Eastern Interior Coal Province Sales Area. It is, I think, interesting, in fact perhaps very interesting, that none of the coal from those four producing districts goes into the state of Indiana." *Steiner Tr.* 2223.

344. Significantly, the Bureau of Mines Supervisory Industry Economist who compiled the data which the Government offers as support for its so-called markets testified that his statistics do not deal with specific markets but only report data on the basis of political boundaries. Moreover, he recognized that, because coal was a transportation intensive commodity, there was a "significant freight differential" between different Freight Rate Districts with respect to consumers, and that, because of this, "anyone with even a minimum amount of knowledge of the coal industry" knows that consumers in the Fulton-Peoria area, for example, cannot be sold coal from Southern Illinois on a competitive basis with coal mined in the Fulton-Peoria area. *Gallagher Dep.* 3, 100, 103-04.

345. The analysis of coal distribution patterns offered by defendants confirms that competition among coal mines is determined by location, transportation factors, and coal characteristics. It is not determined by political

boundaries or the geological unification of a coal bearing sequence of rock.*

IX. FREEMAN AND UEC HAVE LONG BEEN PREDOMINANTLY COMPLEMENTARY RATHER THAN COMPETITIVE PRODUCERS.

346. The evidence as a whole establishes that Freeman and UEC have long been predominantly complementary rather than competitive coal producers. *Steiner Dep. Ex. 2, paragraph 12; Steiner Tr. 2225, 2228.*

347. As is detailed below, the "common customers" of UEC and Freeman identified by the Government, GX 88-91, were shown to be multi-plant companies with no one facility able to be served competitively by both Freeman and UEC, or were shown to involve similarly non-competitive situations such as the shipment to a single plant of essentially different products.

348. With respect to Central Illinois Light Company (CILCO), for example, UEC shipped coal to facilities in Peoria which Freeman's mines—because of their freight disadvantage—could not serve competitively. Similarly, Freeman sold coal to CILCO's plant in Springfield which UEC's mines—again because of a freight disadvantage—could not reach competitively. As Mr. Morris put it, "We could reach Peoria from our Cuba-Buckheart Mines, and they could not. They could reach Springfield and we could not." *Morris Tr. 206-07.* Mr. Nugent explained that "the coal from the Crown Mine to the Springfield Plant of Central Illinois Light Company was supplied by truck. The freight rate from the Crown Mine or Springfield area to the Peoria market would not be competitive." *Nugent Tr. 1924.* The non-competitive nature of these shipments was confirmed by the president of CILCO during his testimony at trial. *Davis Tr. 692-93, 702-04.*

349. Caterpillar Tractor Company, Illinois Power Company, and Marquette Cement Manufacturing Company were also shown to be companies with multi-plant opera-

* See GF § VI B, ¶ 6 at p. 19.

tions receiving coal from UEC at one location and from Freeman at another, with no competitive overlap. *Morris Tr.* 206-07, 215-19; *Nugent Tr.* 1923, 1925; *DX* 76; *DX* 230. As the Chairman of the Board of Illinois Power Company explained, "Because of the location of United Electric and Freeman mines as related to the generating stations of Illinois Power Company we had not regarded the two companies as competitors with respect to serving any particular station. Freight costs prevented such competition." *DX* 230.

350. Freeman's shipments to Dairyland Power Cooperative, Foote Minerals, Union Electric Company, and Central Illinois Public Service Company's Meredosia station were of the by-product dust, whereas UEC's shipments were screenings. *Morris Tr.* 208-09, 211-12, 214-15; *Morris Dep.* 300; *Nugent Tr.* 1924-25; *Moser Tr.* 1513-14; *Tomey Tr.* 330-32; *Tarzy Dep.* 223-30; *DX* 231.

351. Dust is a resultant product which occurs during the preparation of metallurgical coal. In the past it was thrown away on "gob piles" at the mines. In more recent years, however, special equipment for the handling and burning of dust has been developed and installed at certain generating facilities which permits the use by them of limited amounts of dust along with regular coal screenings as boiler fuels. *Morris Tr.* 208, 568-69; *Nugent Tr.* 1850-53; *Tarzy Dep.* 223-24; *Tomey Tr.* 331; *Moser Tr.* 1513-14.

352. As the responses to the Subpoena Questionnaire demonstrate, dust is produced almost exclusively* by those mines, including Freeman's, in the Southern Illinois Freight Rate District, where high quality metallurgical coal is located. *DX* 51, *Set P-2C, Report 3*; *DX* 54. UEC has no reserves suitable for metallurgical use and has not and could not produce dust. *Morris Tr.* 209-10, 480.

353. Dust is sold at a price under its cost of production. Since the alternative is to throw the dust away,

* A small amount of dust occurs at those few mines which continue to prepare high quality domestic grade coal for what little remains of the home heating market. *Morris Tr.* 209-10; *DX* 51, *Set P-2C, Report 3*.

however, and since its sale offsets mining costs which are incurred in any event, realization from the sale of dust contributes to overall profitability. *Nugent Tr.* 1851-52; *Morris Tr.* 208. Because dust is merely an offal which results during the preparation of metallurgical coal, its availability is, of course, tied to and limited by the demand for metallurgical coal. *Tomey Tr.* 331-32; *Nugent Tr.* 1850.

354. Once a facility has installed special equipment for the handling and burning of dust, competition for the dust portion of its requirements is limited to those Southern Illinois mines which produce dust. Competition for the balance of its business occurs among those producers whose mines are located in that Freight Rate District enjoying a freight advantage with respect to the facilities in question. In light of this, it is clear that the shipments of UEC screenings and Freeman dust to common customers were in fact complementary rather than competitive transactions. *Tomey Tr.* 331-32; *Morris Tr.* 208-12, 214-15; *Nugent Tr.* 1924-25; *Moser Tr.* 1510, 1513-14. As an executive from Union Electric Company explained it:

"Well, the dust is a byproduct of the metallurgical field, and there is only a limited amount of that available, and we have been able to utilize that in our boilers due to the economics of the situation, and we can only use about 50 percent of it, however, in our boilers and we have to mix it with the screenings. So, you are really not talking about two competitive situations here. One is on the screenings and one is on the dust." *Tomey Tr.* 331.

355. Two other of the Government's "common customer" examples were shown to be situations where UEC had no competitive status at all. Thus, in the case of TVA, permission was received to ship coal from UEC's Fidelity mine in fulfillment of Freeman's contract with TVA during certain periods of the year when adverse river conditions foreclosed the Fidelity mine from its natural markets. The UEC coal was sold below cost and was justified solely as a short term proposition which,

by keeping the Fidelity mine running, would reduce fixed capital costs. UEC alone could not have committed itself to TVA competitively on a long term or even on a yearly basis. *Hill Tr.* 1084-88; *Morris Tr.* 211; *Nugent Tr.* 1925; *Nugent Dep.* 233-34; *Tarzy Dep.* 79-81; *Folsom Tr.* 2485; *DX* 103-04.

356. Wisconsin Public Service Company also did not purchase directly from UEC. Because of the design of the utility's boiler equipment, UEC, standing alone, would not have been able to supply the company's fuel requirements. The UEC shipments were undertaken solely because Freeman had trouble fulfilling its contractual obligation. UEC's coal had to be mixed with Freeman's coal at a dock in Chicago before shipment to the utility in order to meet the coal specifications required. *Morris Tr.* 212-13; *Nugent Tr.* 1925. During his deposition, the Superintendent of Steam Plants of Wisconsin Public Service Company, Mr. Morrison, confirmed that UEC, independently, would not even be considered as a potential supplier by his company.* *Morrison Dep.* 19.

357. Only one of the "common customer" examples cited by the Government appears to have involved a situation where the coal shipments by UEC and Freeman, had the two companies been independent, might have been competitive: sales to Commonwealth Edison Company. The competitive situation with respect to Edison's future coal requirements has been dramatically altered, however, by recent air pollution concern and regulation. Because of its low sulphur coal program,

* The balance of the "common customer" shipments, apart from those to Commonwealth Edison, were shown to be similarly non-competitive. UEC's shipments to Inland Steel Company were of steam coal for the generation of electricity, while Freeman's shipments were of metallurgical coal from making steel; Freeman's shipments to Illinois Power Company's Vermillion plant did not overlap UEC's shipments at all, but merely represented the fulfillment of UEC's contractual obligation upon the exhaustion of reserves at UEC's Mary Moore mine located fifteen miles from the facility in question; and the Freeman coal consumed at the Grand Tower generating station of Central Illinois Public Service Company proved to be dust. *Morris Tr.* 208, 215-19; *Nugent Tr.* 1925; *Camicia Tr.* 1424-25; *Morris Dep.* 301; *DX* 231.

Edison has already begun "phasing out" high sulphur coal producers such as United Electric so that, in the present competitive situation, such producers are no longer the "principal competitors" for or "major suppliers" of its coal requirements. This factor, as well as UEC's lack of reserves, has foreclosed UEC from the Edison market. Mr. Gordon Corey, Chairman of Edison's Finance Committee, specifically pointed out that "the United Electric contract expires this year and has not been renewed." *Corey Tr.* 1658-59.

358. In any event, UEC and Freeman's sales to Edison in the past have to be considered in light of Edison's substantial coal requirements. Because Edison was required to purchase coal from several Freight Rate Districts in order to fulfill its needs, the competition which a given mine had to meet in bidding for Edison's business was that of the other mines within its Freight Rate District which were also bidding for Edison's business rather than that of mines in other Freight Rate Districts. *Nugent Dep.* 251; *Tarzy Dep.* 239, 244-45; *Camicia Dep.* 126-27.

359. Even if, contrary to the evidence, an independent United Electric would be able to compete with Freeman for the future business of Commonwealth Edison, it belies common sense to conclude that the UEC-Freeman combination could have or might have any adverse effect on Commonwealth Edison. Edison's \$2.5 billion in assets, magnitude of coal purchases,* commitment to nuclear energy, readiness to use alternative fuels and ownership of its own coal reserves and uranium resources make it totally improbable that Edison would be so affected. The candid and unchallenged testimony of one of Edison's top officials at trial makes this clear—even if the Government is correct in asserting that Commonwealth Edison does not take "unfair advantage" of midwestern coal producers. *Corey Tr.* 1611-13; *GF* § VI, ¶ C(9) at p. 25; see also *Findings* 297-302, 310.

* 1967 sales to Commonwealth Edison accounted for about a third of UEC production. Commonwealth Edison purchases from UEC represented only a tenth of its overall coal requirements. Admitted by plaintiff, DPTF 93.

360. Apart from shipments to Commonwealth Edison, however, and as discussed in Findings 314 through 341, UEC's mines are located in Freight Rate Districts which sell to different markets from those served by the Freight Rate Districts where Freeman's mines are located. This confirms that the UEC and Freeman combination is predominantly complementary rather than competitive.*

X. THE GOVERNMENT'S CASE IS BASED UPON MISCONCEPTIONS OF THE REALITIES OF THE COAL INDUSTRY

A. INTERFUEL COMPETITION CANNOT BE IGNORED

361. On the basis of all the evidence, it is clear that the likely competitive effect of the UEC-Freeman combination must be determined within the context of energy sources used to produce electricity, space heating and process heat, including the boiler fuels coal, gas, oil, nuclear energy, as well as pumped storage, hydropower, and other technologically emerging sources of energy. See Findings 138-51, 166, 192-282.

362. The Government's request that the Court ignore the reality of interfuel competition, and assess the probable competitive effects of the combination solely with reference to coal, is bottomed on its contention that in the midwest "coal has had little competition from other fuels." *Government Brief*, p. 71. This contention finds no support in the record. On the contrary, as the situation was summed up by the Government's own economist:

"The customers in this case all—all the utility customers indicated that they consider all sources of fuel.

* * *

* The Government's contention that this finding is inconsistent with Freeman's ability to provide "backup reserves" for United Electric was discredited at trial. *Nugent Tr.* 1975-76. See Finding 445.

"They did not say that they considered the primary competition coal with reference to future facilities, certainly.

"They also said they would consider all things, and then make a decision." *Folsom Tr.* 2564-65.

363. The evidence demonstrates that suppliers of alternate fuels offer UEC and Freeman at least as much competition as do coal producers. Their customers consider all sources of fuel, not just coal. See *Findings* 192-282. Accordingly, the likely effect of the UEC-Freeman combination on competition cannot be accurately measured without recognizing that the level of that competition is governed largely by interfuel rivalry. Thus, whether it is all energy sources for the uses mentioned, or only coal, that is chosen as the relevant product market, the vigorous competition which coal faces from other fuels must be considered.

B. DISTRIBUTION PATTERNS OF COAL ARE NOT DETERMINED BY ARTIFICIAL CONSIDERATIONS

364. The expert economists of both the Government and the defendants emphasized that choosing the proper geographic markets within which to test the competitive implications of the UEC-Freeman affiliation was not a "counsel of perfection," but rather involved determining which of the possible approaches to defining such markets made the most economic sense. *Folsom Tr.* 2537; *Steiner Tr.* 2141-42.

365. An analysis of midwest coal distribution patterns based on all the evidence—including comprehensive questionnaires forwarded to midwest coal producers and consumers under subpoena issued by the Court—shows that

* Mr. Folsom had testified similarly during his direct examination that "virtually every utility official who testified either through deposition or from the stand, during the hearings on this matter, indicated that they have considered all fuels in making a decision as to which one was the most appropriate:" *Folsom Tr.* 2466.

the markets within which midwest coal producers are able to compete are determined by the ICC-designated Freight Rate Districts within which their mines are located. *See Findings* 283-345.

366. The most appropriate geographic markets within which to assess the probable competitive effects of the UEC-Freeman combination are the sales areas able to be served by mines in the Freight Rate Districts where the mines of UEC and Freeman are located. *See Findings* 309-45. The only fault which the Government's economist could find with such an approach was that, in following it, defendants had considered separately the facilities of Commonwealth Edison Company and consumers located in the Greater Chicago Air Quality Control region. *Folsom Tr.* 2467-68. However, the evidence shows that there are sound economic reasons which warrant the separate consideration of these markets. *See Findings* 310-11.

367. The approach the Government urges is that Illinois and what they refer to as the Eastern Interior Coal Province Sales Area, should be used to provide the geographic context with reference to which the likely competitive effects of the merger should be determined. *See GF § VI A, B at pp. 14-23.* The record, however, offers no support for such an approach.

368. There is no Eastern Interior Coal Province Sales Area coal market. On three separate occasions—on direct examination, under cross-examination and when questioned by the Court—the Government's economist confessed that he had "problems" with the Government's suggestion of such a market, principally because of its failure to take account of the important role which transportation costs play in determining where coal from any given mine can be sold. Furthermore, Mr. Folsom could offer no explanation as to why certain areas had been included within the defined area or why certain others had been excluded. *Folsom Tr.* 2469-70, 2536, 2608-09; *compare Steiner Tr.* 2138, 2155, 2157-59, 2223.

369. The only testimony that the Government's economist could offer in support of such a market was, in answer to a hypothetical question, the speculation that there was a "possibility" that the price of coal in one

midwest state acted as a restraint on the price of coal in other midwest states. *Folsom Tr.* 2471. On cross-examination, however, he conceded that he knew of no record evidence which supported his speculation, and the evidence is to the contrary. Compare *Folsom Tr.* 2593-94 with *Schotters Dep.* 34; *Nicosin Dep.* 70-71; *Hill Tr.* 1131; *Gaunt Dep.* 6-7; *Ward Dep.* 12-13, 27; *Beck Dep.* 6-7; *Morrison Dep.* 18-19; *Nugent Dep.* 224, 228.

370. Similarly, there is no Illinois coal market. The Government's economist not only conceded that, in general, state boundaries are not a good determinant of a market, but admitted that he knew of no factor that made the state boundaries of Illinois a meaningful measure of the relevant geographic market for coal. *Folsom Tr.* 2500-01.

371. The Government's economist also stressed that you have to have the testimony from the people about the fact that they buy coal all over an area before you can justify saying it is an economic market. *Folsom Tr.* 2608. Here, however, not a single industry witness—either consumer or producer—testified to the existence of an Illinois market for coal. Even the economist from the U.S. Bureau of Mines, who prepared the Illinois data on which the Government relies, recognized that the market areas in which coal could be sold were determined by Freight Rate Districts and not by state boundaries. See *Finding* 344. When confronted with this testimony, the Government's rebuttal economist stated as follows:

"I don't recall at this time his testimony.

"I would certainly think it fair to say I did not weigh heavily what he said about coal markets." *Folsom Tr.* 2592.

372. Use of Illinois as a market is particularly inappropriate in this proceeding. All but one of Freeman's mines are located in the Southern Illinois Freight Rate District, and the evidence shows that approximately 70 percent of the coal produced by Freeman's Southern Illinois mines is shipped to states other than Illinois. Moreover, less than 38 percent of Freeman's total 1967 production not sold to Commonwealth Edison was shipped to

consumers in Illinois. *Freeman Response to Government Questionnaire.*

373. Regardless what geographic boundaries are chosen for the relevant market, however, it is essential to any meaningful analysis of, and conclusions concerning, the likely competitive consequences of the challenged combination that full account be taken of the important role which the factors of transportation and coal quality characteristics play in determining where coal from the mines of UEC and Freeman can be sold. Even if the Government's suggested markets of the "Eastern Interior Coal Province Sales Area" and Illinois were accepted, for example, it would still be necessary to recognize that UEC and Freeman serve essentially different areas and customer facilities within the "Eastern Interior Coal Province Sales Area" and Illinois and that the companies have long been predominantly complementary rather than competitive coal producers. *See Findings 283-360.*

C. THE GOVERNMENT'S STATISTICS ARE MISLEADING

Production Figures Are an Inadequate and Inaccurate Measure of Market Strength

374. All of the Government's rankings of what it labels "leading" midwest and Illinois coal producers are based solely on statistical data relating to past coal production. GX 62-86. The evidence makes it clear, however, that the competitive strength of a coal producing company today is not measured by its past or current production, but by the extent to which it has the coal reserves necessary to compete in the market for long-term utility contracts. *See Findings 88, 126-29, 173-78, 386-90.*

375. The inadequacy of using production, rather than reserve statistics, as a measure of market strength is illustrated by the total absence of Humble Oil and Refining Company from any of the Government's rankings. While Humble is not scheduled to bring its Carlinville mine on stream until next year, the company has huge reserve holdings which have made it a most significant

competitive factor for several years. *Shipley Stip.* 1-5; *DX* 61; *Corey Tr.* 1599-1600, 1666.

376. Conversely, Little Dog Coal Company, according to the Government a "leading" producer in 1967, abandoned operations the following year. *Compare GX* 72 *with Beck Dep. Ex.* 1. The Government offered no explanation as to what happened to its "leading" producers Mid-Continent Coal Corporation, Lumaghi Coal Company, Saxon Coal Corporation, Young's Coal Corporation, Crab Orchard Cooperative Coal Company, J. W. Coal Company, Big Muddy Coal Company, Ajax Coal Company, Jo-Lor Mining Company, or Snow Hill Coal Corporation (all of which apparently abandoned operations)—other than to show that they were not acquired by other midwest coal producers. *Compare GX* 87 *with GX* 62-86, *DX* 46.

377. In connection with this proceeding, midwest coal producers supplied extensive information with respect to their holdings of coal reserves in Illinois, Indiana and West Kentucky. Significantly, this information shows that UEC's reserves amount to less than one percent of the total midwest reserve holdings of these producers.* Freeman and UEC together hold less than five percent of these midwest reserves. *DX* 61.

The Inadequacy of Production Figures as a Measure of Market Strength Is Compounded by Grouping Them in Unrealistic Markets

378. The Government's production statistics are also misleading in view of the fact that they combine production data from many mines which, because of the factors of transportation and coal quality characteristics, do not, and can not, compete with each other. As Professor Steiner observed at trial:

"I do not believe production shares, market shares, concentration ratios make sense at all, or have any

* As is detailed in Findings 389, 391-97, 428-30, most of these reserves are not commercially recoverable by UEC, and, of those that are, all but four million tons have already committed on long-term contracts.

genuine indication of the degree of competition unless they are measured in a meaningful economic market. I think that without a market one does not have the basis of using these statistics.

* * * *

"I don't believe you just draw circles on a map and say that is a market." *Steiner Tr.* 2160.

379. The Government's production statistics are also misleading because they lump together production of steam coal and metallurgical coal, which, as the Government admits, are not competing products. *DX* 46. Significantly, only one partner to the combination being challenged (Freeman) can produce both. *Steiner Tr.* 2138; see also *Findings* 64, 78, 352.

380. Finally, the Government's production statistics are an inadequate and inaccurate measure of market strength in view of their failure to reflect interfuel competition and the competitive pressure which it places upon coal producers. *Steiner Tr.* 2188.

The Government's Statistics Show No Real Concentration Trend

381. The one thing which the Government's statistics do show, however, is that there has been no real trend toward concentration in midwest coal production. There were decreases, for example, of more than ten percent and five percent in the UEC-Freeman combination's percentage of total coal produced in the midwest and Illinois, respectively, between 1960—the year following the restructuring of UEC's Board and management in order to reflect the affiliation—and 1967, the last year for which there is record evidence. Furthermore, apart from Peabody Coal Company, the share of production accounted for by the two, four, and ten largest producers in both Illinois and the midwest has either remained relatively stable or, in some cases, declined.* *GX* 64, 72, 77, 85; *DX* 237; *Steiner Tr.* 2230-43.

* The 1970's will see further deconcentration in midwest coal production as Humble Oil opens a mine with an output of 3,000,000 tons per year and Peabody divests itself of an operation annually producing 6,000,000 tons. See *Findings* 245-425.

382. The competitive implications of the growth in the share of midwest coal production accounted for by Peabody Coal Company have presumably been considered and dealt with to the satisfaction of the Government in the consent decree entered in *United States v. Peabody Coal Company*. DX 84.

383. The lack of any true industry-wide trend toward concentration over the past decade is particularly significant when consideration is given to the fact that the production of the small mines that have withdrawn from the industry has not been transferred to larger producers, but rather has disappeared with the decline and end of the home heating and railroad markets which these small producers served. *Steiner Tr.* 2240-41.

384. Both the defendants' and the Government's economic experts agreed that it is the disappearance of domestic and railroad markets, coupled with the rise of long-term contracts involving substantial quantities of coal and the employment of mass transportation methods, that is responsible for and explains the withdrawal of many small producers from the coal industry. *Steiner Tr.* 2127, 2240-41; *Folsom Tr.* 2581; see also *Findings* 159-64, 182-84.

385. Even those smaller producers who continue in operation are, as they recognize, in an essentially different business from large-scale producers competing for the long term business of utility consumers. See *Finding* 162. Consumers recognize that, since such small producers lack the reserves and capacity necessary to bid on long-term contracts, it would be of no benefit to have them soliciting their business. Thus, when asked by Government counsel whether it was a benefit to his company to have a number of coal suppliers soliciting its business, one utility executive responded as follows:

"It's a definite benefit to have a number of sound, reliable suppliers, yes. There is not distinct benefit in having a great number of suppliers, but to have the type that give us the foundation for a sound fuel program, yes." *Wood Tr.* 659-60; see also *Steele Tr.* 938-39; *Tomey Tr.* 333-38; *Davis Tr.* 694-95, 764; *Schotters Dep.* 11-12; *Nicosin Dep.* 37-38.

XI. THE EFFECT OF THE COMMON OWNERSHIP OF UNITED ELECTRIC AND FREEMAN HAS NOT BEEN, AND WILL NOT BE, SUBSTANTIALLY TO LESSEN COMPETITION IN ANY LINE OF COMMERCE IN ANY SECTION OF THE COUNTRY

A. UEC DOES NOT HAVE THE UNCOMMITTED RESERVES WHICH A COAL COMPANY REQUIRES IN ORDER TO COMPETE.

386. Current production figures do not provide an adequate measure of a coal producer's market strength. The critical determinant of whether a coal company can offer effective competition as a coal supplier is the level of uncommitted coal reserves under its control. Current production statistics reflect only past commitments of coal reserves, and these cannot be sold a second time. In the utility market, where supply assurance is required, long term contracts cannot be obtained without the existence of verifiable, substantial and uncommitted reserves within the coal producer's control. *DX 86, p. 8; Steiner Dep. Ex. 2, paragraph 6; Steiner Dep. 191, 283, 364-68; Steiner Tr. 2140-41, 2247-48, 2437.*

387. The testimony of coal consumers confirmed that a coal producer must have ample uncommitted reserves in order to compete for their business. As one utility executive explained: "In the long-range competitive picture, one of the big things is to assure ourselves of the proper reserve situation. We don't go into contracts with [a coal producer] or consider them competitive . . . unless they have the reserve to back it up, and we can count on them down the road." *Wood Tr. 609, 672, 678; Corey Tr. 1611-12; Davis Tr. 729, 756-57; Tomey Tr. 335-37; Steele Tr. 942, 969; Moser Tr. 1521; Schotters Dep. 12; DX 77.*

388. Similarly, defendants' expert economist, Professor Steiner, characterized reserves as the "life blood" of a coal company, and observed that even "if it turned out that one company had 50 percent of this year's production" but had "no reserves other than those committed

on long-term contracts, I would think that company would not be an important factor in future competition." *Steiner Dep.* 191, 292. "The reserve position is important in the sense that a company, in order to be an effective force, must have sufficient reserves to credibly bid on contracts demanding large quantities of coal." *Steiner Tr.* 2248; *see also Steiner Tr.* 2251, 2288; *Steiner Dep.* 187, 259-60, 262-64, 281-287, 304-05; *Nugent Tr.* 1849-50, 1931-33; *Sherwood Tr.* 1450-51; *Ward Dep.*, pp. 13-14, 59-60.

389. Of the approximately 56,000,000 tons of economically recoverable coal reserves at UEC's existing mines, all but approximately 4,000,000 tons—an amount equal to about nine months' production by UEC at present levels—have been committed to long-term contracts already entered into by UEC. *DX* 63.

390. The government's own economist, Mr. Folsom, conceded that, absent a merger, if UEC could not acquire additional strip reserves or undertake deep mining, the company's only alternative would be to "mine themselves out of business," and recognized that "UEC is not going to be in that situation a viable competitive force in this market." *Folsom Tr.* 2476, 2584.

B. UEC'S STRIP RESERVES AT THE INDUSTRY FIELD AND OTHER SCATTERED MIDWEST STRIP RESERVE HOLDINGS HAVE NO COMPETITIVE PROMISE.

The Industry Field

391. Some time prior to 1948, UEC began to acquire strip reserves in the so-called Industry Field, south of the town of Industry near the border of McDonough and Schuyler counties in Illinois. Presently, its holdings in the Industry Field consist of some twelve and one-half million tons of strip reserves. *Finding* 79(B); *Weir Dep. Ex.* 5; *Nugent Dep. Ex.* 38. On all the evidence, it is clear that the Industry Field is not now, nor is it likely to become, economically mineable. *DX* 87, p. 4; *Weir Dep.* 60; *Nugent Tr.* 1946; *Nugent Dep.* 377; *Morris Dep.* 308-09; *Latimer Dep.* 428; *DX* 24.

392. UEC personnel familiar with the Industry Field testified at length to the many reasons which make it unlikely that these reserves can be recovered on a commercially favorable basis within the foreseeable future: the thinness of the seam, the high overburden ratio, the presence of unfavorable mining conditions, the field's distance to transportation arteries, the lack of a sufficient quantity of mineable reserves to justify the capital expenditure required to open a new mine, and the life. Moreover, in view of current air pollution control regulations, the high sulphur content of the coal in the field would be an additional disadvantage. *Nugent Tr.* 1945, 1983-85; *Morris Dep.* 150, 153-54, 172, 308-09, 312-14; *Nugent Dep.* 338-39, 342, 377; *Tarzy Dep.* 128-30, 135, 142, 170-71; *Latimer Dep.* 428; *DX* 12, p. 5; *DX* 24; *DX* 113, pp. 4023, 4253. As Mr. Nugent summed up the situation with respect to the Industry Field at trial:

"There was a time in the early part of 1960 when I suggested that land be acquired [at the Industry Field] at farm prices, that I felt perhaps this coal might be mined after all of the coal in the Fulton County is exhausted, and that could be some 20 years hence. . . . With the further development of nuclear energy, my present thinking is that the company had better take its licking now and dispose of the land, at farm prices if need be." *Nugent Tr.* 1946.

393. Consumers with whom UEC had discussed the Industry Field recognized its lack of competitive promise, and past efforts by UEC to interest midwest utilities in coal from the Industry Field met with no success. *Davis Tr.* 727; *Morris Dep.* 172-73; see also *Moser Tr.* 1564-65; *Wood Tr.* 657-58, 680.

394. Similarly, an official from the coal producer which operates that coal mine closest to UEC's reserves in the Industry Field, testified that his company's mine was a marginal operation when operating in overburden ratios comparable to those in the Industry Field, and pointed out numerous factors which made it even less likely that UEC's Industry reserves could be mined profitably. *Hopper Tr.* 1876-78, 1895-1901.

395. An evaluation by the mining engineering firm of Paul Weir Company confirms the "distinctly marginal" nature of the Industry reserves and the fact that they would not be competitive in the foreseeable future with reserves now being mined or held for future operation elsewhere within Illinois, Indiana or West Kentucky. *DX 87, p. 4*. Mr. Weir testified during his deposition that "I don't think that these reserves will ever be mined, in any circumstances." *Weir Dep. 60; see also Weir Dep. 52, 58-62, 69-70; DX 87, pp. 2-4*.

396. So convincing is the evidence that the reserves at UEC's Industry Field hold no competitive promise that, even before the trial began, Government counsel indicated to the Court that they were "inclined to agree" with the defendants' representation that "as of today they are not commercially valuable." *Pre-trial Conference, October 3, 1969, Tr. 23*.

Other Miscellaneous Midwest Strip Reserves

397. The only other midwest strip reserves controlled by UEC are two isolated tracts in Fulton (344,842 tons) and Perry (1,714,710 tons) Counties in Illinois. These have been owned since before July 31, 1958. *Finding 78 (D); DX 60A, 60B*. These reserves are not of sufficient size to support the opening of a mine at these locations. *Latimer Tr. 1041; Tomey Tr. 387; Schotters Dep. 11-12; Organ Dep. 111; DX 87, Table 3*.

C. COMMERCIALY RECOVERABLE STRIP RESERVES IN THE MIDWEST ARE NOT AVAILABLE FOR ACQUISITION.

398. As is detailed in the Findings below, the evidence supplied by geologists, mining engineers, officials of UEC and Freeman, other producers and energy consumers establishes beyond question that commercially recoverable midwest strip reserves are not available for acquisition which would enable UEC to continue operations beyond the exhaustion of reserves at its present mines.*

* UEC's diligent but unsuccessful efforts to acquire additional economically mineable strip reserves in the past are discussed in Findings 92-99.

399. The report prepared by Mr. Organ, defendants' expert geologist, concludes that "by 1960, there was no longer any possibility of acquiring or establishing, for transfer to coal producers, of any new economically mineable strip coal acreage in the Illinois basin of sufficient size to justify the opening of new mines." The report states that, on the contrary, "such economically mineable strip reserves as exist within the Illinois basin are under the control of existing producers, and that such other strip reserve acreage that has not been acquired holds no competitive promise." *DX 88.**

400. Similarly, the Principal Geologist of the Illinois State Geological Survey stated that "so intense has been the interest in the more favorably situated strippable reserves, that I do not know of any prime acreage that is not now under control." *DX 34; see also Kolbe Dep. Ex. O, p. 3.*

401. These intense efforts to build up substantial inventories of strip reserves, and the vast quantities resultingly controlled by other coal producers, are a reflection of the scarcity of such reserves. If economically mineable strip reserves were readily available, producers would be unwilling, and there would be no necessity, to invest substantial sums of money to tie up coal fields for the future. *DX 61, 62; Steiner Dep. 366-67.*

402. The report prepared by Paul Weir Company, mining engineers retained as experts by defendants, observes that the Denmark field of strip reserves being developed by Ayrshire Collieries is "the last undeveloped major reserve of strippable coal in the Tri-State Area and we doubt that any new comparable strip operations can be developed in the Tri-State Area." The report expresses the belief that "peak production in strip coal will be reached within a very short time and a gradual decline will ensue thereafter," and notes, in this regard, that "coal producers in Illinois, Indiana, and West Kentucky have been faced for some time with a deteriorating strip reserve position," and that "despite diligent search,

* During his deposition, Mr. Organ defined the Illinois basin as "that coal basin which lies wholly within Illinois, Indiana and West Kentucky." *Organ Dep. 113.*

operators have been unable to find economically strippable reserves not now controlled by others." *DX 87, pp. 22-24, 27-28; see also Weir Dep. 67, 131-32; DX 87, pp. 17-28 and attached letter.*

403. As of July, 1969, in the opinion of Paul Weir Company, mining engineers, there are not available in Illinois for purchase from non-operating owners a sufficient number of adjoining tracts that when assembled would amount to strippable coal reserves over 10 million tons. *Admitted by plaintiff, DPTF 119.* This opinion was reconfirmed by Paul Weir Company in its expert report. *DX 87, p. 28 and attached letter, p. 3.*

404. The unavailability of additional midwest strip reserves was recognized by other coal producers. Under questioning by Government counsel, Mr. Organ, defendants' expert geologist, related numerous conversations he had had with other coal executives with respect to the unavailability of strip reserves. *Organ Dep. 115-20.* The chief executive of one coal producer told him that his company had "turned heaven and earth trying to find" strip reserves but had met with no success. *Organ Dep. 119.* As Mr. Nugent testified during his deposition, the unavailability of strip reserves is known by virtually everyone in the coal business—"down to cub engineers who have just been in the business a couple of years." *Nugent Dep. 393.*

405. The unavailability of commercially recoverable midwest strip reserves is also confirmed by the unsuccessful efforts to acquire such reserves by Amalgamated Industries and by Humble Oil and Refining Company, a subsidiary of Standard Oil Company (New Jersey). The investigation for such reserves by Amalgamated "indicated that there were no significant strip reserves available in Illinois other than those owned by coal companies." *Dorrance Dep. 11.*

406. Similarly, none of the several hundred thousand acres of coal lands acquired in Illinois by subsidiaries of Standard Oil Company (New Jersey) are suitable for strip mining. Humble was looking for coal reserves in blocks of a minimum of approximately 100,000,000 tons each for future development of hydrocarbon raw ma-

terials. Upon investigation, Standard concluded that strip-pable coal reserves were not available in blocks of a minimum of approximately 100,000,000 tons. *Admitted by plaintiff, DPTF 118.*

407. Consumers were also familiar with scarcity of commercially recoverable strip reserves in the midwest. *Schotters Dep. 39-40; Dorrance Dep. 11.* As Mr. Nugent summed up the situation: "There is not a utility man in the state buying coal, a knowledgeable utility man, who does not know that strip reserves are not available." *Nugent Dep. 393.*

408. UEC's executive personnel were examined at length both during deposition and at trial concerning the availability to UEC of additional midwest strip reserves. The testimony was uniform that "there are not any available." *Camicia Dep. 191; Morris Tr. 431-32; Ames Tr. 1709; Thorsen Tr. 586-87; Camicia Tr. 1439-41; Nugent Dep. 375-78, 389-94; Inman Dep. 134, 160.*

409. It is particularly significant that the two witnesses whom the Government hoped would support its position that additional midwest strip reserves were readily available for acquisition by UEC failed to do so. Thus, Mr. Simon of the Illinois State Geological Survey testified that, by itself, his Department's reserve estimates "certainly couldn't be used to support" the Government's contention that UEC will be able to acquire additional economically mineable strip reserves in Illinois to continue its mining operations beyond the time its existing strip reserves are exhausted. *Simon Tr. 62-63; see also Camicia Tr. 205.*

410. Government witness Hopper of Ayrshire Collieries recognized that "it is common knowledge within the coal industry that strip reserves available for acquisition are in extremely short supply and that if there were known economically recoverable reserves there would be an eager scramble for them." *Hopper Tr. 1892.*

411. In the end, even the Government's own economist was forced to concede that the "record indicates that high quality strip reserves are relatively scarce in Illinois. *Folsom Tr. 2476; see also Steiner Dep. 258-59, 305-06.*

D. STANDING ALONE, UEC WOULD BE UNABLE SUCCESSFULLY TO UNDERTAKE DEEP MINING.

412. In view of the unavailability of commercially recoverable midwest strip reserves, UEC's only hope for remaining a viable competitive force would be if it could successfully undertake the deep mining of coal. *Folsom Tr.* 2476, 2584; see *Finding* 390. As is detailed below, the evidence establishes that there is no prospect that UEC—absent Freeman—could successfully enter into deep mining.

UEC's Strip Mining Experience Would Be of No Benefit.

413. Since at least 1930, and continuing to date, UEC has had neither the equipment, personnel nor expertise required for successful entry into deep mining. *Morris Dep.* 77, 194-197, 218; *Morris Tr.* 159; *Camicia Tr.* 1392; *Camicia Dep.* 194; *Inman Dep.* 14-15, 29, 158, 171-174; *Tarzy Dep.* 110; *Ames Tr.* 1698, 1708; *Thorsen Tr.* 588, 892. As one of the company's executives expressed it, "We were strictly a strip mining company." *Tarzy Dep.* 110; see also *Findings* 100-15.

414. UEC's experience as a strip miner would be of no assistance to it in attempting to undertake deep mining operations. *DX* 87, pp. 28-30; *Camicia Tr.* 1392-93. As one knowledgeable industry witness put it, compared to strip mining, deep mining "is just a different ball game, a different business altogether." *Camicia Tr.* 1391.

415. Deep mining requires far more expertise than, and expertise quite different and distinct from, that required for strip mining. Apart from the marketing and sale of coal, there is virtually no phase of the expertise acquired in strip mining that could be carried over into deep mining; there is no correlation between the engineering, management, knowhow or knowledge of mining. *DX* 87, p. 29; *Camicia Tr.* 1392.

416. There is, moreover, a crucial and critical shortage of miners, supervisors and technically trained people with an expertise in deep mining. *DX* 87, pp. 28-29; *Camicia Tr.* 1394.

417. In comparison to strip mining, deep mining is vastly more complex, poses totally different engineering problems and involves working conditions of an entirely different nature.* Strip mining is in many ways analogous to earth moving. *DX 87*, p. 29; *Camicia Tr.* 1392. Deep mining, however, is a very difficult and highly technical operation. The successful opening of a deep mine requires expert knowledge and knowhow regarding a host of complex technical matters such as seam exploration, shaft and hoist construction, drilling and fore-drilling of the seam, underground roof conditions and maintenance, gas emission, drainage, ventilation, extraction methods, machinery, and equipment and mine safety. *Camicia Tr.* 1389-90; *Gaunt Dep.* 25.

418. Because of these complexities, deep mining entails substantially more risk than strip mining. Bad judgment with respect to any one of the factors involved in deep mining could well lead to the failure of the entire mine. *DX 87*, p. 29; *Camicia Tr.* 1391.

419. In light of the complexities, difficulties and risks which deep mining entails, it is doubtful that a utility company or any other large buyer of coal would be willing to enter into a contract with a company with no experience in that field and one without a staff, when coal is available and underground mines can be opened up by producers that are in the business and competently staffed and with adequate capital and reserves. *Nugent Dep.* 431.

420. This was confirmed by the testimony of consumers. The president of one midwest utility, for example, testified that, since "we always have felt or thought of United Electric as a strip mine company, not having any prior experience with deep mining, I would say that we would be hesitant about entering any commitment

* With regard to the latter point, an experienced deep mining executive testified that deep mining required "a different type of person, even insofar as attitude." *Camicia Tr.* 1392. One UEC executive put it this way: "We are afraid. If you told me . . . that starting tomorrow you can't do what you are doing, we are going to send you down to train you to be the superintendent for an underground mine, I would say, 'Uh-uh, I'm on my way. Just get another boy.'" *Tarry Dep.* 111.

for coal from an unknown source, so to speak." *Steele Tr.* 1000; see also *Moser Tr.* 1576; *Tomey Tr.* 340-42; *Gaunt Dep.* 25-26; *Abrahamson Dep.* 27; *Sloane Dep.* 24-25; *Morris Dep.* 271.

*An Independent UEC Would Not Likely Attempt
Deep Mining.*

421. Absent affiliation with an experienced deep mining coal producer such as Freeman, there is no reasonable probability that UEC could successfully undertake deep mining, and therefore no reasonable probability that it would try. *DX* 87, pp. 29-30; *Camicia Tr.* 1393; *Inman Dep.* 171; *Steiner Dep.* 259-60, 305-06; *Steiner Dep. Ex.* 2, paragraph 12.

422. Nicholas T. Camicia, President of Pittston Company, one of the world's largest deep mining coal producers, and a past president of both UEC and Freeman, testified at trial that, on the basis of his professional knowledge and expertise as a deep mining engineer and executive, as well as the familiarity with UEC's capabilities and personnel which he gained while serving as the company's president, he did not see how UEC could possibly make a successful entry into the deep mining of coal without an affiliation with a deep mining company. Mr. Camicia testified that, indeed, he did not "see how they could even make a start at it." *Camicia Tr.* 1393. It was his conclusion that UEC "certainly was not in a position to go into a deep mine venture," and that "they would be making a mistake if they had tried it." *Camicia Tr.* 1419, 1422.

423. Executives from other companies lacking deep mining expertise testified to the inability of their companies to undertake deep mining operations. *Shorwood Tr.* 1455, 1471, 1474; *Schotters Dep.* 13; *Nicosin Dep.* 88.

424. Significantly, there is no evidence that any company has even attempted to make a grass roots entry into deep mining coal operations in recent history in the midwest. Both Mr. Nugent and Mr. Camicia testified that they knew of none. *Nugent Dep.* 424; *Camicia Tr.* 1395. While the government suggested, in response to defendants' interrogatories, that Ayrshire Collieries

opened its Thunderbird mine under such circumstances, an executive from Ayrshire confirmed at trial that the Thunderbird mine was not opened until after Ayrshire had acquired two coal companies which operated deep mines. *Compare DX 46 with Hopper Tr. 1869, 1878-79.*

425. Humble Oil and Refining Company is a subsidiary of Standard Oil Company (New Jersey), the world's largest industrial corporation, having assets of more than \$16 billion and an annual net income of well over \$1 billion. Humble has begun construction recently of a deep coal mine in Illinois. However, as the Government pointed out during its successful challenge of Standard Oil's proposed acquisition of a company engaged in the deep mining of potash, there is no correlation between Standard Oil's ability to make a grass roots entry into deep mining and that of a smaller company attempting a similar venture. *Shipley Stip. 1-5; DX 81-83; see also United States v. Standard Oil Co. (New Jersey), 253 F.Supp. 196, 200, 208, 223, 227 (N. Jersey 1966).* Moreover, as Mr. Camicia pointed out at trial, "the jury is still out" on the question whether Humble's efforts will be successful. *Camicia Tr. 1424.*

426. It would not be possible for UEC to enter into deep mining by acquiring a small deep mining company. Such companies do not have, because they do not require, a staff with the technical know-how for large scale deep mining. Underground operations of substantial scale are a prerequisite to the maintenance of such a staff. *Camicia Tr. 1428-29.* The president of one small deep mining company was asked whether someone with his experience and knowledge would be able to open a deep mine producing a million or two million tons a year. He responded, "Well, I couldn't, and I don't think anyone else could." *King Dep. 19.*

427. Even the Government's witness from Ayrshire Collieries, which had opened a deep mine after acquiring two deep mine companies, testified that the mine has lost money nine of the eleven years it has been operating, that it was so clear the mine would never be profitable that five million of Ayrshire's investment has already been written off, that Ayrshire would "absolutely not" have

undertaken the venture had they known what was in store, and that it was "entirely possible" that someone who had a greater amount of experience and expertise in deep mining would never even have opened the mine. *Hopper Tr.* 1878-81.

UEC's Deep Reserves Are Not Presently Mineable.

428. In any event, in order to remain a competitive factor, UEC—even if it had the requisite underground expertise—would need choice deep reserves which could be developed in the short term as the reserves at its present mines become exhausted. However, the only field of midwest deep reserves controlled by UEC, the so-called Round Prairie Field, could not be developed on a competitive basis within the near future.* *Nugent Dep.* 396-402; *Camicia Dep.* 41-43, 171-72, 175, 189; *Morris Dep.* 241, 244; *Camicia Tr.* 1400; *Hopper Tr.* 1873, 1886-88.

429. The Government's present assertion that UEC's reserves at Round Prairie "represent a valuable corporate asset" stands in sharp contrast to its pre-trial concession that "as of today they are not commercially valuable." Compare *Govt. Brief*, p. 137, with *Pre-trial Conference*, October 3, 1969, *Tr.* 23.

430. The isolated patches of deep coal controlled by UEC in Perry County, Illinois and at the former Mary Moore mine in Vermillion County, Illinois, closed in 1965 upon the exhaustion of strip reserves, total approximately 7 million tons, and, because of the small quantity of coal involved, could not justify the opening of a mine even by an experienced deep coal operator. *Shipley Stip.* 4; *Tomey Tr.* 337; *Schotters* 12; *DX* 87, Table 2.

* The Round Prairie Field is located in Perry and Washington Counties, Illinois, in the Belleville Freight Rate District, and consists of some 44 million tons of coal. Acquisitions began in the field in 1958. See *Findings* 79 (C) and 107-15.

**E. KNOWLEDGEABLE INDUSTRY WITNESSES
CONFIRMED THAT THE UEC-FREEMAN AF-
FILIATION POSES NO THREAT TO COMPETI-
TION**

431. Considering that the Freeman-UEC affiliation is now into its second decade, there is considerable probative value in the testimony offered by knowledgeable industry witnesses on whose alleged behalf the Government brings this action. These witnesses were shown, in terms of both responsibility and expertise, to be particularly well qualified to evaluate the likely competitive effects of the UEC-Freeman combination.* Moreover, they detailed the factors which afforded concrete reasons for their conclusions. Indeed, the Government itself, throughout both its Proposed Findings and Brief, makes repeated reference and citation to the testimony of these witnesses. The Government also devoted extensive discovery efforts to the securing of opinions from both the customers and competitors of United Electric and Freeman as to the effect upon them of the combination challenged. *See, e.g., DX 46, 66, 73, 77; GX 101.*

432. As a result of its investigation, the Government admitted in its Answers to Defendants' Interrogatories that it had "no information" as to any competitor who had been or would be "adversely affected or disadvantaged in its ability to compete" or any customer who had been or would be "deprived of actual competition" or "deprived of potential competition" by reason of the challenged acquisition. It did, however, identify those who had informed the Government that the UEC-Freeman combination *would not* have such an effect. *DX 46.*

433. As is detailed below, the documentary and testimonial evidence supplied by these and other witnesses

* The Government's lone effort to establish that such witnesses were indifferent to the competitive implications of mergers among coal producers elicited the fact that the witnesses on the stand at the time had, in the past, taken the initiative in complaining to the Department of Justice when his evaluation led him to conclude that another merger between two coal producers did pose a serious threat to competition. *Davis 753-54.*

was uniformly to the effect that the long-standing affiliation between UEC and Freeman has had no anti-competitive effect in the past and is not likely to have *any* such effect, much less a *substantial* one, in the future. Many of these witnesses expressed their considered judgment that the UEC-Freeman combination had already led to significant competitive benefits and that it was likely that there would be further competitive benefits in the future.

The Evidence from Other Coal Producers

434. Responsible executives from large, medium sized, and small coal producers attested to the lack of any adverse effect on competition as a result of the UEC-Freeman competition. When inquired of by Government counsel prior to the filing of the lawsuit, H. B. Lee, Vice President-Sales, Peabody Coal Company, W. B. Buchanan, Jr., President, Old Ben Coal Corporation, and Henry C. Woods, President, Sahara Coal Company, all declared that their companies had not and would not be adversely effected or disadvantaged by reason of the challenged acquisition. *DX 46.*

435. Similarly, during deposition, Clarence V. Beck, President of Little Dog Coal Company, William D. Stiehl, President of Belle Valley Coal Company and Leon King, President of Barbara-Kay Coal Corporation—testified that there neither had been nor would be any adverse effect on their companies because of the challenged acquisition, and that they could see no benefit to forcing Freeman and United Electric to operate independently of each other. *Beck Dep. 10-11; Stiehl Dep. 16-17; King Dep. 19-20.*

436. Significantly, the only coal producer called by the Government to testify recognized that it would be a mistake to divest UEC from General Dynamics in the belief that the former could remain a viable competitive entity by securing additional strip reserves or successfully making a grass roots entry into deep mining. *Hopper 1901-1903.*

The Evidence from Coal Consumers

437. Documentary and testimonial evidence concerning the competitive implications of the challenged acquisition was also supplied by responsible officials from a representative cross-section of consumers, including large, medium-sized, and small public utilities, a rural electric cooperative, federal electric authority, retail coal dealer, and several industrial concerns. It is particularly significant that this testimony, subjected to Government cross-examination, was supplied by representatives of utilities accounting for the purchase of more than 60 percent of the coal produced in the midwest for the generating of electricity.

438. It was the judgment of these knowledgeable industry witnesses that the longstanding affiliation of Freeman and UEC had had no adverse affect on competition. *Tomey Tr.* 342-343; *Davis Tr.* 703; *Steele Tr.* 942; *Hill Tr.* 1097; *Moser Tr.* 1521. *Corey Tr.* 1611; *Schotters Dep.* 17; *Gaunt Dep.* 27-28; *Morrison Dep.* 26-27; *Ward Dep.* 26-27; *Abrahamson Dep.* 28; *Petersen Dep.* 16; *Redard Dep.* 13; *Nicosin Dep.* 44.

439. Similarly, it was the judgment of these knowledgeable industry witnesses that the longstanding affiliation of Freeman and UEC was not likely to have any adverse affect on competition in the future. *Tomey Tr.* 342-343; *Wood Tr.* 608-610; *Steele Tr.* 942; *Moser Tr.* 1521; *Corey Tr.* 1611-1612; *Schotters Dep.* 17-18; *Gaunt Dep.* 28; *Petersen Dep.* 16; *Nicosin Dep.* 44-46; *DX* 73, 76, 77, 219.

440. Similarly, it was the judgment of these knowledgeable industry witnesses that there would be no benefit to competition if Freeman and United Electric were forced to operate independently of each other. *Davis Tr.* 703-705; *Steele Tr.* 942; *Hill Tr.* 1097-1098; *Schotters Dep.* 18; *Gaunt Dep.* 28-29; *Morrison Dep.* 27; *Ward Dep.* 27-30; *Abrahamson Dep.* 28-29; *Petersen Dep.* 16; *Nicosin Dep.* 46.

441. Before expressing their conclusions, these producer and consumer witnesses testified at length concerning factors bearing on the likely competitive consequences

of the UEC-Freeman combination: including, among others

- (a) The role in the market place played by vigorous inter-fuel competition. *Wood Tr.* 661; *Steele Tr.* 936, 940-41; *Gamble Tr.* 1266-70; *Davis Tr.* 693, 698-700; *Moser Tr.* 1517, 1573-74; *Corey Tr.* 1585; *Tomey Tr.* 325-26, 403; *Hill Tr.* 1083; *Morrison Dep.* 8-13, 26; *Abrahamson Dep.* 28, 61-62; *Gaunt Dep.* 22-23; *Ward Dep.* 27-28; *Schotters Dep.* 9-11, 17, 39; *Nicosin Dep.* 46-49; *Beck Dep.* 8; *Stiehl Dep.* 14-16; *King Dep.* 17; *DX* 36, 67, 71-72, 74-75, 78; *DX* 90, pp. 7, 9, center insert; *DX* 93, 95, 96, 99, 100; *DX* 146, p. 8; *DX* 147, p. 13; *DX* 148, p. 6; *DX* 149, pp. 3, 12-13; *DX* 230, 242.
- (b) The impact on coal consumption of the increasing concern with air pollution. *Tomey Tr.* 397; *Steele* 940-41, 956; *Wood Tr.* 604-05, 668; *Davis Tr.* 693, 712-13; *Moser Tr.* 1517-20; *Corey* 1602-05; *Hill Tr.* 1134; *Gamble Tr.* 1326; *Schotters Dep.* 15-16; *Petersen Dep.* 10-14; *Morrison Dep.* 24-26; *Ward Dep.* 28; *Redard Dep.* 7-8; *Nicosin Dep.* 49; *Beck Dep.* 9; *Stiehl Dep.* 13-14; *King Dep.* 17-18; *DX* 71; *DX* 90, center insert; *DX* 91, 92, 97, 100; *DX* 149, pp. 3, 18; *DX* 154, 160-162, 163, 176, 178, 179; *DX* 234; pp. 6-7; *DX* 238-39.
- (c) The important role played by transportation factors in determining the markets that mines in any Freight Rate District are able to serve. *Wood Tr.* 606-07, 680, *Steele Tr.* 936-37, 1001; *Moser Tr.* 1510; *Tomey Tr.* 332-33; *Davis Tr.* 695-96, 702-04; *Hill Tr.* 1087-89, 1094, 1098, 1127; *Gaunt Dep.* 6-7; *Ward Dep.* 11-12, 27; *Redard Dep.* 11-12; *Schotters Dep.* 7-8, 17; *Morrison Dep.* 18-19; *Nicosin Dep.* 41-44, 64-65, 70-71; *Beck Dep.* 6-7, 38-39; *Stiehl Dep.* 7; *King Dep.* 15; *DX* 69, 76, 77, 230, 231; *Beck Dep. Ex.* 1.
- (d) The significance of coal quality characteristics in determining the markets that mines in any Freight Rate District are able to serve. *Moser Tr.* 1513-

16, 1534, 1540-42; *Tomey Tr.* 330-32, 334-35; 393-94; *Steele Tr.* 937-38, 944; *Wood Tr.* 607-08; *Davis Tr.* 697-98; *Gaunt Dep.* 19-22; *Ward Dep.* 19-25; *Redard Dep.* 9-11; *Schotters Dep.* 8-9; *Morrison Dep.* 16, 19-20, 46; *Nicosin Dep.* 50-60, 64-65; *Petersen Dep.* 8-10; *Nix Dep.* 7-9, 13-15; *Stiehl Dep.* 8-10; *King Dep.* 8; *DX* 69, *DX* 74, p. 3; *DX* 158, 231.

- (e) UEC's lack of the coal reserves necessary to compete for future long-term utility contracts. *Wood Tr.* 608-10, 672, 678-79; *Steele Tr.* 969, 997; *Mosser Tr.* 1521, 1564; *Tomey Tr.* 335-37, 343; *Davis Tr.* 702, 756-57; *DX* 26, 77.
- (f) The fact that UEC and Freeman had long been predominantly complementary rather than competitive producers, and the competitive benefit, in light of this, of Freeman backing up UEC's contract commitments with its own reserves. *Wood Tr.* 610; *Davis Tr.* 702, 730-31, 756-57; *Tomey Tr.* 374; *Hill Tr.* 1086-88, 1097; *DX* 66, 104, 105.

F. THE UEC-FREEMAN AFFILIATION HAS LED TO SIGNIFICANT COMPETITIVE BENEFITS.

442. Not only does the evidence show that there is no likelihood that the UEC-Freeman affiliation will adversely affect competition but, as is detailed in the below Findings, the combination involves significant competitive benefits. *See also Findings* 127-29.

443. One of the principal competitive benefits testified to was the advantage to consumers, as a result of the UEC-Freeman affiliation, of being able to enter into contracts with UEC in which Freeman reserves would be used to back up those of United Electric in such a way as to guarantee that UEC's contract commitments would be fulfilled. Absent such a backup, these consumers testified they would not look to UEC as a potential source of supply able to compete for their business. *Davis Tr.* 702, 730-31, 756-57; *Wood Tr.* 610; *Tomey Tr.* 374. As one utility executive explained, with Freeman's reserves back-

ing up UEC's contract commitment, "it made the package a competitive situation for us," whereas, without the Freeman backup, UEC would not have been in a position to bid "for that portion of our business." *Wood Tr.* 610.

444. Freeman has already delivered back-up reserves on a UEC contract. UEC had a long-term contract to supply the Vermillion plant of Illinois Power Company located approximately 15 miles from UEC's Mary Moore mine. When the reserves at Mary Moore became exhausted before anticipated and the mine was closed, Freeman fulfilled the balance of UEC's contract commitment with coal from its own reserves. *Morris Tr.* 215-17, see *Finding* 356 (footnote).

445. The reserve backup commitments by Freeman involve a price "sacrifice" to it, and would not be entered into by an independent company. They are desirable from the standpoint of a combined UEC-Freeman, however, since they enable UEC to sell all of its coal on long-term contracts for which UEC would otherwise be unable to compete. *Morris Tr.* 217; *Nugent Tr.* 1975-76; see also *Findings* 126-27.

446. Another competitive benefit is the ability which only the combined companies have to fulfill contractual obligations which one of them has undertaken with coal produced by the other during periods of emergency such as mining difficulties, wildcat strikes, or rail or water transportation problems. *Morris Tr.* 211-13; *Nugent Tr.* 1925; *Tomey Tr.* 339-40; *DX* 66, 104, 105; see also *Findings* 355-56.

447. For example, Elmer Hill testified at trial about the value to TVA of the UEC-Freeman relationship, *Hill Tr.* 1084-88. In 1962, a contract between Freeman and TVA was negotiated which also provided for shipments from UEC's Fidelity mine during periods when river conditions foreclosed the mine from its normal markets. See *Finding* 355. Upon its execution, Mr. Hill wrote Freeman and expressed his belief that the provisions of the contract were "good for both of us and we will certainly reap mutual benefit from it." *DX* 104; see also *DX* 103.

448. Because the affiliated companies combine UEC's strip mining skill with Freeman's deep mining expertise, they are able to compete in situations necessitating both strip and deep operations, whereas, were each operated independently, neither would have the requisite skills to be a competitive factor. Already the UEC-Freeman combination has encountered one such situation in connection with the proposed development of a power plant near the Kaiparowitz Plateau in southern Utah. *Tarry Dep.* 414-27. Were the companies unable to present a proposal involving utilization of the strip mining capability of UEC along with Freeman's deep mining talents, it is unlikely that either would have been a competitive factor. *Tarry Dep.* 423-25.

G. IMPLICATIONS INHERENT IN THE GOVERNMENT'S APPROVAL — "WITHOUT RESERVATION" — OF A PROPOSED ZEIGLER-MIDLAND COMBINATION.

449. Also significant to an evaluation of the likely competitive effects of the UEC-Freeman combination are the implications inherent in the Department of Justice's approval, "without reservation," of a proposed purchase by Zeigler Coal and Coke Company * of the mining properties being divested by Peabody ("Midland"). *DX* 37. This occurred while the instant litigation was pending and during the effecting of the consent decree entered in *U.S. v. Peabody Coal Co.*, Trade Reg. Rep. (1967 Trade Cas.) Para. 84,376 (N. D. Ill. 1967). *DX* 84.

450. A combination of Zeigler and Midland would, in its essential respects, be virtually indistinguishable from the Freeman-UEC combination. Under the terms of the consent decree, *Midland* will be a coal company in Illinois capable of producing 6 million tons per year and controlling 128.5 million tons of reserves. The divested company will operate the Elm and Allendale strip

* Zeigler is also referred to in some exhibits by the name of its subsidiary, Bell & Zoller Coal Company. See, e.g., *DX* 41, p. 9; *DX* 61.

mines in the Fulton-Peoria Freight Rate District, and the Mecco strip mine in the neighboring Mineral-Atkinson Freight Rate District. *Compare DX 84, Para VII with DX 37; see also DX 50, Set P-1 Report F-1; Weir Dep. Ex. 1.* In 1967 Zeigler produced approximately 4 million tons from 5 mines located in the Murdock, Belleville, Southern Illinois and West Kentucky Freight Rate Districts. *DX 40, p. 1; DX 50, Set P-1, Report F-1, Weir Dep. Ex. 1.* The company controls approximately 550 million tons of coal reserves in the midwest. *DX 61.* A combined Zeigler-Midland would result in a company with 8 mines—3 strip and 5 deep. The combination would have a mine or mines in two states (Illinois and Kentucky), in each of the four largest (in terms of production) Freight Rate Districts in the midwest, and in half the 12 midwestern Freight Rate Districts. *Terleke Dep. Ex. 11.* It would also have oil and gas properties.* *DX 40 at p. 6.* The combination, were UEC and Freeman independent, would rank second in coal production in both Illinois and the three state (Illinois, Indiana and West Kentucky) area. *GX 72, 85.*

451. The parallels to the combination here being challenged are clear: UEC-Freeman also combines strip operations with deep operations, also consisted of 8 mines in 1967, and also produced coal in the Fulton-Peoria, Belleville and Southern Illinois Freight Rate Districts. *See Findings 59-60, 65, 76-77.* But there are significant differences: UEC-Freeman has mines in only one midwestern state, in only 4 Freight Rate Districts, it has no oil or gas properties, and has substantially fewer coal reserves than would a Zeigler-Midland combination. *See Findings 53, 309; DX 61.*

452. The Government claims that the Freeman-UEC combination, because it results in a company whose coal production is the second largest in both Illinois and the Midwest, so changes the structure of the industry that anti-competitive effects are likely. *Complaint, paragraphs 16, 18; Folsom Tr. 2462, 2483-84, 2573.* Such a contention is particularly unpersuasive in view of the fact that

* In 1967, more than a third of Zeigler's net income came from the sale of gas and oil. *DX 40, p. 1.*

a Ziegler-Midland combination, which the Government approved without reservation, would have caused the exact same change in the structure of the industry and would, under the Government's theory, presumably have the same competitive effects. *Complaint, paragraphs 16, 18; Folsom Tr. 2589-91.*

453. The Government was unsuccessful in its efforts to establish a distinction between the Zeigler-Midland combination, which they would approve "without reservation," and the Freeman-UEC affiliation, which they seek to dissolve. While the Government initially suggested that Zeigler had "lost money," Zeigler's financial statements confirm that the company has conducted profitable operations for at least the past eleven years, and that its financial condition was excellent at the very time of the Department of Justice approval—with the company "determined to make 1969 a banner year." *Compared DX 38-44 with Pre-trial Conference of October 3, 1969 Tr. 11.* Government counsel was forced to concede that they had "some sympathy with the defendants in the Zeigler matter." *Id. at 10.*

454. Similarly, the Government's economic expert, though hesitant at first, eventually conceded that the competitive implications of the structural changes likely to accompany a Zeigler-Midland combination were essentially similar to those which he thought inherent in the Freeman-UEC combination. *Folsom Tr. 2589-91.*

455. If the Government is satisfied that allowing Zeigler and Midland to combine into the second largest coal producer in both Illinois and the Midwest—with greater reserves than a combined Freeman-UEC—will not harm competition, then the combination of Freeman and UEC—with fewer reserves available for future competition—clearly cannot be likely to lead to any substantial lessening of competition.

456. While the legality under the merger laws of a Zeigler-Midland combination is not before the Court, nor do the parties address themselves to that issue, the Government's approval of that combination makes clear that the competitive effect of the UEC-Freeman combination cannot be determined by mere structural analysis. As

even the Government economist finally pointed out, "I would still want more information. I would still want to look further." *Folsom Tr.* 2591. While Mr. Folsom was speaking of Zeigler-Midland, this approach must also be followed in analyzing the UEC-Freeman combination.

H. SUMMARY.

457. The effect of the UEC-Freeman combination has not been, and will not be, substantially to lessen competition among energy resources in any sales area served by either UEC or Freeman, in the Greater Chicago Air Quality Control Region, or for the fuel business of Commonwealth Edison Company.

458. When appropriate consideration is given to the economic realities discussed in all of the above Findings, it is equally clear that the effect of the UEC-Freeman combination has not been, and will not be, substantially to lessen competition in the production or sale of coal in Illinois or in what the Government has defined as the Eastern Interior Coal Province Sales Area.

459. Based upon all the evidence, the effect of the UEC-Freeman combination has not been, and will not be, substantially to lessen competition in any line of commerce, in any section of the country, in view of, among other things:

(A) The fact that the combination has been in effect since 1959 and such effects of that combination as have been shown, have been shown to have been beneficial to competition;

(B) The fact that there has been, and there is very likely to continue to be, an abundance of competition among coal producers generally, and in the midwest particularly;

(C) The fact that for producers such as UEC-Freeman, the utility market for coal has become, and will undoubtedly remain, the only significant outlet for its production;

(D) The fact that in the utility market, producers such as UEC-Freeman face sophisticated, knowledgeable purchasers wielding great economic power and having substantial bargaining strength;

(E) The fact that there is intense interfuel competition which gives utilities and other coal purchasers additional bargaining strength and which puts great pressure upon coal producers to remain competitive;

(F) The fact that increasing concern with air pollution will adversely affect coal producers—particularly high-sulphur coal producers such as United Electric; will place upon them a serious competitive disadvantage in their rivalry with other fuels, and will increase the pressure on them in their attempt to remain competitive;

(G) The fact that UEC and Freeman are predominantly complementary rather than competitive coal producers;

(H) The fact that the only evidence mustered by the Government to support their claim of a substantial lessening of competition are statistics which are unpersuasive because (1) they fail to reflect the very real competition coal faces from other forms of energy; (2) they are grouped in markets which have no economic reality; (3) they ignore the best determinative of a coal producer's market strength—coal reserves; (4) they combine products that do not compete; (5) they ignore the predominantly complementary, rather than competitive, nature of the UEC and Freeman shipments; and (6) they purport to show increasing concentration in coal production when in fact no such trend really exists;

(I) The fact that evidence from a host of knowledgeable industry representatives—including competitors and customers of UEC-Freeman—confirms that the combination has not led, and is not likely to lead to, a substantial lessening of competition, for concrete reasons which they spelled out;

(J) The fact that the Government was prepared to approve "without reservation" a combination of coal producers identical, in essential respect, to the one here challenged, and one that would have evoked a structural change in the industry similar to the one they seek here to reverse;

(K) The fact that virtually all of the economically mineable strip reserves of UEC have been sold under long-term contracts, the fact that UEC has neither the

possibility of acquiring more nor the ability to develop deep coal reserves, and the fact that it has thus ceased to be a competitive force; and

(L) The fact that because of UEC's lack of mineable coal reserves with which to compete in the future, and with no prospect for acquiring them, continuation of its affiliation with Freeman cannot conceivably be adverse to competition, nor would its divestiture provide a gain to competition.

CONCLUSIONS OF LAW

1. The Court has jurisdiction of the subject matter and of the parties.

2. Irrespective of the line of commerce or section of the country in which the competitive effects of the challenged acquisition are examined, the acquisition has not substantially lessened competition or tended to create a monopoly.

3. Counsel for the plaintiff have not established by the preponderance of reliable, probative and substantial evidence on the whole record that the effect of the challenged acquisition may be substantially to lessen competition or to tend to create a monopoly in any line of commerce in any section of the country.

4. The challenged acquisition does not violate section 7 of the Clayton Act, 15 U.S.C., Section 18, as amended.

Respectfully submitted,

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